

CITY OF WORTHINGTON

**PROPOSAL,
CONTRACT DOCUMENTS
AND SPECIFICATIONS**

For

Selby Blvd West Bridge Replacement

PID 116037

DBE Goal 8%

ROBYN STEWART, CITY MANAGER

**JOHN MOOREHEAD, P.E.,
DIRECTOR/CITY ENGINEER
CITY OF WORTHINGTON
SERVICE AND ENGINEERING DEPARTMENT
380 HIGHLAND AVE.
WORTHINGTON, OHIO 43085
PHONE: (614) 431-2425
john.moorehead@worthington.org**

INDEX

INDEX	2
BIDDING REQUIREMENTS	4
ODOT LPA CONTRACT PROVISIONS (10-16-23)	19
CONTRACT PROVISIONS FEDERAL AID CONSTRUCTION CONTRACTS	43
APPENDIX A	57
BIDDING FORMS	58
STATEMENT OF QUALIFICATIONS	59
PROPOSED USE OF SUBCONTRACTORS	60
BID GUARANTY AND CONTRACT BOND	61
NON-COLLUSION AFFIDAVIT	67
BID PROPOSAL	68
CONTRACT FORMS	71
CONTRACT	72
NOTICE OF AWARD	76
ACCEPTANCE OF NOTICE	77
NOTICE TO PROCEED	78
CHANGE ORDER	79
Certificate of Substantial Completion	80
APPLICATION FOR PAYMENT	81
PREVAILING RATES OF WAGES	82
GENERAL CONDITIONS	83
1.0 Conformity with Plans and Specifications	84
2.0 Schedules, Reports and Records	84
3.0 Engineer's Authority	85
4.0 Owner's Inspector	86
5.0 Inspection and Testing	86
6.0 Correction of Work	87
7.0 Surveys, Permits, Regulations, Land and Right-of-Way	88
8.0 Maintenance of the Work Site	88
9.0 Laws to be Observed	89
10.0 Federal Aid Provisions	89
11.0 Responsibility for Damage Claims	89
12.0 Contractor's Responsibility for Work	90
13.0 Supervision by Contractor	90
14.0 Personal Liability of Public Officials	90
15.0 Non-Waiver of Legal Rights	91
16.0 O.S.H.A. Compliance	91
17.0 Changes in the Work	91
18.0 Changes in Contract Price	91
19.0 Time for Completion and Liquidated Damages	92
20.0 Suspension of Work, Termination and Delay	93
21.0 Scope of Payment	95
22.0 Compensation for Altered Quantities	95
23.0 Extra Work and Force Account Work	95

24.0 Eliminated Items	98
25.0 Claims for Adjustment and Disputes	98
26.0 Payments to Contractor	98
27.0 Acceptance of Final Payments as Release	100
28.0 Contract Security	100
29.0 Assignments	100
30.0 Indemnification	101
31.0 Patented Devices, Materials and Processes	101
32.0 Subcontractors	101
33.0 Guaranty	102
34.0 Dispute Resolution and Administrative Claim Process.....	103
35.0 Taxes	106
36.0 Nondiscrimination in Employment	106
37.0 Contract Work Performed by the Owner	107
38.0 Certified Payroll	107
39.0 Utilities	108
Supplementary Specifications	110
Attachment A: Prevailing Wages	121
Attachment B: Project Plans	122
Attachment C: Geotechnical Report	123

BIDDING REQUIREMENTS

BIDDING PROCESS

Selby Blvd West Bridge Replacement PID 116037

In an effort to make the solicitation process more efficient and cost effective for both vendors and the City of Worthington, the City has adopted an electronic bidding process for projects subject to competitive bidding. Electronic bids will be submitted at the **bidexpress.com** website as the primary method of bid submission. All electronic bidders must first register on **bidexpress.com** and create an Info Tech Digital ID for free, which is used to digitally sign bids. Digital IDs/Signatures assures the agency knows who the bid is really from (forgery resistance), ensures that no one can alter a bid (non-repudiation), prevents the information in a bid from disclosure to unauthorized parties (secrecy), and safeguards that even authorized parties cannot access them prior to the public opening (sealing).

It can take up to five business days to process your Digital ID and it is highly recommended that a Digital ID be enabled 48 hours in advance of submitting an electronic bid. Please plan accordingly. Instead of paying paper bidding costs (hand or hired delivery costs), a fee of \$25 will be incurred for those who wish to bid electronically on a pay-per-solicitation basis. Alternatively, you may subscribe for \$50 per month for unlimited electronic bid submission to all agencies that post solicitations on the **bidexpress.com** website, plus get email notifications by agency/worktype/commodity code.

For bidders who are bidding online and wish to utilize the electronic bid bond option, please see the **FAQs** page regarding electronic bid bonds (bottom of the page in the link).

For additional guidance, please contact the Bid Express team toll free at (888) 352-2439 (select option 1) or at support@bidexpress.com.

Paper bid sets will not be provided by the Department of Service & Engineering, though registered plan holders may download and print a paper set at their own expense.

Plans, specifications and related information may also be viewed electronically at the Department of Service & Engineering, 380 Highland Ave., Worthington, OH 43085.

The City of Worthington shall not be responsible for full or partial sets of Contract Documents obtained from any other source.

The Engineer's estimate of construction cost for this project is **\$1,145,132.00**

The City of Worthington reserves the right to reject any and all bids and to waive irregularities in bidding.

A Pre-Bid Meeting will be held at the City of Worthington Engineering Offices located at 380 Highland Ave. Worthington, Ohio 43085 on **April 22, 2024 at 12:00 PM**. The meeting is not mandatory.

Only contractors pre-qualified with ODOT are eligible to submit bids for this project. Pre-qualification status must be in force at the time of bid, at the time of award, and through the life of the construction contract. For work types that ODOT does not pre-qualify, the LPA must still select a qualified contractor. Subcontractors are not subject to the pre-qualification requirement. The "prime" contractor must perform no less than 30 percent of the total original contract price.

By submission of bid/proposal of bid/proposal the bidder, contractor, subcontractor, supplier or vendor agrees to comply with Section IX and Section X as a part of the Required Contract Provisions Federal-Aid Construction contracts.

Proposal note regarding DBE Requirement

This note will be required since ODOT Central Office has determined a DBE requirement is mandated for the project.

"Disadvantaged Business (DBE) Requirement. DBE participation goals (Subcontracts, materials, supplies) have been set on this project for those certified as DBE's in accordance with the TEA - 21 (1998) and 49 CFR, Part 26, and qualified to bid with ODOT under Chapter 5525 of the Ohio Revised Code (O.R.C.)".

At the beginning of the project proposal, following the project identification, the DBE goal designation is written, i.e.

"DBE Goal: 8%."

INFORMATION FOR BIDDERS

1.0 Receipt of Bids

- 1.1 All Bids for the **Selby Blvd West Bridge Replacement PID 116037** shall have been received electronically through the **Bid Express** process (see Bidding Process information on previous page) by the bid opening time of **April 30, 2024 at 12:00 noon EST**. All bids will be electronically opened at that time. The bid results will be available for public view online at **bidexpress.com** within 24 hours.

2.0 Examination of Contract Documents and the Work Site

- 2.1 The Bidder is required to examine carefully the site of the work and the Contract Documents. The Bidder, in submitting a Bid, warrants that it has investigated and is acquainted with the conditions to be encountered for performing the work including the character, quality, and quantities of work to be performed and materials to be furnished, the prevailing hourly wage rates for the area in which the project is located and the requirements of the Contract Documents hereinafter defined. It is mutually agreed that submission of a Bid shall be considered prima facie evidence that the Bidder has made such examination and is satisfied as to all the conditions which will affect the work.
- 2.2 Further submission of a Bid shall be considered evidence that the Bidder has carefully examined the site of the proposed work, that it is satisfied as to the nature of the subsurface conditions to be encountered in performing the work, and that the Bidder has performed all necessary subsurface test borings, laboratory analyses and other subsurface investigations preparatory to submitting an informed and intelligent Bid and to undertaking performance of the proposed work.
- 2.3 No pleas of ignorance of the Contract Documents, or of the conditions that exist, including subsurface conditions; or of conditions or difficulties, including subsurface conditions, that may be encountered in the execution of the work, as a result of failure to make such examination or investigation, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill in every respect all of the requirements of the Contract, nor will the same be accepted as a basis for any claim whatsoever, for extra compensation, extra work, or for any extension of time.

3.0 Interpretation of Quantities in the Bid Proposal

- 3.1 The quantities listed in the Bid proposal are to be considered as approximate and are to be used only for the comparison of the Bids and as a basis for computing amounts of security or penal sums of Bonds to be furnished. The item costs to be tendered by the Bidders are to be tendered expressly for the scheduled quantities and as they may be increased or decreased by duly authorized Change Orders. Payments, except for lump sum Bids, and except for lump sum items in the item cost Bids, will be made to the Contractor for the actual quantities only if work performed or materials furnished is in accordance with the Contract Documents.

4.0 Addenda

- 4.1 If any person contemplating submitting a Bid for the proposed Project is in doubt as to the true meaning of any part of the Contract Documents, a written request for an interpretation thereof may be submitted to the City Engineer for the project. The person submitting the request will be responsible for its prompt delivery. Written requests for interpretation must be submitted on Bid Express. Any interpretation of the Contract Documents will be made only by Addendum duly issued and a copy of such Addendum will be posted on Bid Express and each plan holder will receive electronic notice. Any such Addenda shall become part of the Contract Documents. The time for opening the bids shall be extended for one week if, within seventy-two hours before the date set for the opening of bids, the Owner mails or otherwise furnishes to prospective bidders a modification of its plans, specifications, or cost estimate for the project. The Owner will not be responsible for any other explanation or interpretation of the Contract Documents. The City Engineer's office hours are Monday through Friday 7:30 AM to 3:30 PM.
- 4.2 The Addendum process shall also be used for unspecified product substitutions. Prospective bidders shall submit written requests at least ten days before the bid closing date. Requests received after this time will not be considered.

5.0 Modification and Withdrawal of Bid

- 5.1 Bids may be withdrawn at any time before the scheduled closing time for receipt of bids. No bid or bid security may be withdrawn or modified after the scheduled closing time for receipt of bids for at least sixty (60) days except as provided in Section 9.31 of the Ohio Revised Code. Bids may be held by the City of Worthington for a period not to exceed sixty (60) days from the date of opening for the purpose of reviewing the Bids and investigating the qualifications of Bidders prior to the award of the Contract, unless the time for awarding and executing the Contract is extended by mutual agreement of the Owner and the successful Bidder.

6.0 Non-collusion Affidavit; Unresolved Finding for Recovery Affidavit

- 6.1 Each Bidder is required to execute and submit with the Bid a Non-collusion Affidavit in order for the Bid to be considered complete.
- 6.2 Each Bidder is required to execute and submit with the Bid an Unresolved Finding for Recovery Affidavit in order for the Bid to be considered complete.

7.0 Bid Proposal

- 7.1 All Bids must be made online through the Bid Proposal forms on Bid Express. Bids must be made separately on labor and material and the total cost for each item shall be the "Total (Sum of Labor and Material)." In the event of conflict, the "Total (Sum of Labor and Material)" of the item or lump sum Bid shall govern. Each Bidder must Bid on all Items and Alternates contained in the Bid Schedule. All Bids not in conformity with this notice may be rejected.
- 7.2 If an item in the Bid Proposal contains a choice to be designated by the Bidder, the Bidder shall indicate its choice in accordance with the specifications for that particular item, and thereafter no further choice will be permitted.
- 7.3 The Bidder's proposal must be approved for submission by the individual proprietor, by two or more members of the partnership, by one or more members or officers of each firm representing a joint venture, or by one or more officers of a corporation, or by an agent of the Contractor legally qualified and acceptable to the Owner. If the proposal is made by an individual, the individual's name and business address must be shown; if as a joint venture, the name and business address of each member or officer of the firms represented by the joint venture must be shown; if by a corporation, the name of the state under the laws of which the corporation is chartered and the name and title of the officer or officers having authority under the by-laws to sign contracts, the name of the corporation and the business address of its corporate officials must be shown; or if by any other business entity the Owner shall require the names and address of the responsible officers of such interested persons or entities. Anyone submitting a proposal as agent must provide legal evidence of this authority to do so.
- 7.4 Before a contract will be awarded to a foreign corporation or a person or partnership non-resident of the State of Ohio, such foreign corporation, person, or partnership non-resident shall file with the Secretary of State a power of attorney designating his/her or its agent for the Secretary of State, as agent for the purpose of accepting service of summons, in any action in law or equity, or both, brought in the State of Ohio.
- 7.5 Bid proposals will be considered informal, irregular, or defective and may be rejected for the following reasons:
- (a) If the proposal is on a form other than that furnished online, by the City of Worthington; or if the form is altered or any part thereof is detached.
 - (b) If there are unauthorized additions, conditional or alternate bids, or irregularities of any kind which may tend to make the proposal incomplete, indefinite, or ambiguous as to its meaning.
 - (c) If the bidder adds any provisions reserving the right to accept or reject an award, or to enter into a contract pursuant to an award.

- (d) If the proposal does not contain a unit price, for each pay item listed except in the case of authorized alternate pay items or lump sum items.

8.0 Bid Guaranty

8.1 Each Bid must be accompanied by a Bid Guaranty payable to the Owner in the form of either:

- (a) A Bond for the full amount of the Bid, with a corporate Surety approved by the Owner. The Bid guaranty form included herein should be used.
- (b) A certified check for 10 percent of the Bid.
- (c) A cashier's check for 10 percent of the Bid.
- (d) An irrevocable letter of credit for 10 percent of the Bid.
- (e) An Electronic Bid Bond available through Bid Express.

8.2 As soon as the Bids have been compared, the Owner will return any submitted physical Bid Guaranties of all except the three lowest and best responsible Bidders. When the Contract is executed, or the period for holding the Bids has expired, any physical submitted Bid Guaranties of the two remaining unsuccessful Bidders will be returned within ten (10) days. Any physical submitted Bid Guaranty of the successful Bidder will be returned after a satisfactory Contract Bond has been furnished and the Contract has been executed.

9.0 Statement of Qualifications

9.1 Each Bid must be accompanied by a Statement of Qualifications on the form provided in the Contract Documents in order for the Bid to be considered complete.

10.0 Proposed Use of Sub-Contractors for Specified Portions of the Work

10.1 Each Bid must be accompanied by a Subcontractor's list on the form provided in the Contract Documents in order for the Bid to be considered complete. Each Subcontractor's name, address and type of work to be performed shall be provided.

11.0 Bidder Investigation

- 11.1 The Owner may make such investigations as it deems necessary to determine the ability of the Bidder to perform the work, and the Bidder shall furnish to the Owner all such information and data for this purpose as the Owner may request. In determining the award, consideration will be given to (a) whether the Bidder maintains a permanent place of business, (b) suitability of the Bidder's plant and equipment for the work, (c) Bidder's financial status and organization, (d) Bidder's record of experience in constructing improvements of this type, and (e) lowest Bid. Notwithstanding the Owner's right to reject any and all Bids, the Owner reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the Owner that such Bidder is properly qualified to carry out the obligations of the Contract and to complete the work contemplated therein.
- 11.2 In addition, the Owner reserves the right to disqualify or refuse to consider a Bid Proposal if a Bidder is in default for any of the following reasons:
- (a) More than one proposal for the same work from an individual, firm, or corporation under the same or different name, or corporation under the same name or corporation with one or more of the same persons as officers of such corporations, or corporations who are holding companies or holding companies which are subsidiaries of such corporations.
 - (b) Evidence of collusion among bidders.
 - (c) Bid prices which obviously are unbalanced.
 - (d) Lack of competency and for inadequate machinery, plant or other equipment, as revealed by experience questionnaires required by the proposal.
 - (e) Uncompleted work, whether or not with the Owner, which in the judgment of the Owner, might hinder or prevent the prompt completion of additional work if awarded.
 - (f) Failure to perform previous contracts adequately or a breach of prior contracts, whether or not the breach was waived by the Owner at a prior time.
 - (g) Any other reasonable cause.
- 11.3 Before any contract is awarded, the Bidder may be required to furnish a complete statement of the origin, composition, and manufacture of any or all materials to be used in the construction of the work together with samples, which samples may be subjected to the tests provided for in these specifications to determine their quality and fitness for the work.

12.0 Combination or Conditional Proposals

- 12.1 If the Owner so elects, proposals may be issued for the project in combination and/or separately, so that bids may be submitted either on the combination or on separate units of the combination. The Owner reserves the right to make awards on combination bids or separate bids to the best advantage of the Owner. No combination bids, other than those specifically set upon the proposals, will be considered. Separate contracts will be written for each individual project included in the combination.

13.0 Contract Award and Execution

- 13.1 After the proposals are opened and reviewed, they will be compared on the basis of the summation of the products of the approximate quantities shown in the proposal by the total (sum of labor and material) price. In the event of a discrepancy between the total (sum of labor and material) price and the extensions, the total (sum of labor and material) price shall govern. The Owner shall also determine any alternate Items as stipulated in the Bid Proposal to be performed and they will be included in above summation. The right is reserved to reject any or all proposals, to waive technicalities or to advertise for new proposals, if in the judgment of the Owner its best interests will be promoted thereby.
- 13.2 The award of the work, if it is awarded, will be made as soon as is reasonably possible after the opening of the Bids to the lowest and best responsible Bidder whose proposal complies with all the requirements prescribed. In no case will an award be made until all necessary investigations are made as to the responsibility of the Bidder to whom it is proposed to award the contract. No bid will be accepted if it exceeds the cost estimate by more than 10%, except as may be specifically authorized by rule established by the City Manager.
- 13.3 The Owner reserves the right to rescind the award of the work at any time before the execution of the Contract by all parties without incurring any liability. Therefore, if the Contractor changes its position, economically or otherwise, after receiving a verbal or written notice of award and in reliance upon the Owner executing the Contract, the Contractor agrees to do so solely at its own risk and the Owner will not incur any liability from the Contractor's change of position.
- 13.4 The lowest and best responsible Bidder to whom the work is awarded will be required to execute the Contract and to furnish the required Contract Bond and Certificates of Insurance within 10 calendar days from the date when Notice of Award is communicated in writing or orally to the Bidder. In case of failure of the Bidder to execute the Contract, the Owner may, at its option, consider the Bidder in default, and the Bidder will be subject to liability as set forth in Section 153.54 of the Ohio Revised Code. The award may then be made to the next lowest and best responsible Bidder, or the work may be readvertised as the Owner may decide.
- 13.5 A Contract Bond in the amount of 100% of the Contract price, with a corporate Surety approved by the Owner, will be required for the faithful performance of the Contract. The Contract Bond form included herein shall be used.

- 13.6 The Contract Bond furnished by the Contractor shall remain in effect until the expiration of the one-year guarantee period as assurance of the guarantee herein stipulated.
- 13.7 All Bid Guaranty and Contract Bonds shall be signed by an authorized agent of an acceptable Surety Bonding Company and by the Bidder. Surety Bonding Company bonds shall be supported by credentials showing the power of attorney of the agent, the Certificate showing the legal rights of the Bonding Company to do business in the State of Ohio and a financial statement of the surety. These supporting credentials need only be furnished by the successful Bidder upon the award of the work.
- 13.8 The lowest and best responsible Bidder will further be required to furnish the Owner with a complete breakdown of the lump sum Bid items to the satisfaction of the City Engineer before signing the Contract. The lump sum breakdown shall be in sufficient detail to provide a check of claims for partial payment requests.
- 13.9 The Notice to Proceed shall be communicated in writing or orally to the Contractor within 10 days of the execution of the Contract by the Owner. Should there be reasons why the Notice to Proceed cannot be issued within such period, the time may be extended by mutual Agreement between the Owner and Contractor.

14.0 [Intentionally left blank.]

15.0 Insurance

- 15.1 The Contractor shall purchase and maintain insurance on an occurrence basis as will protect it and the Owner from claims set forth below which arise out of or result from the Contractor's execution of the work, whether such execution be by the Contractor or by any Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:
- (a) Claims under Workers' Compensation, disability benefit, and other similar employee benefit acts.
 - (b) Claims for damages because of bodily injury, occupational sickness or disease, or death of an employee.
 - (c) Claims for damages because of bodily injury, sickness or disease, or death of any person other than an employee.
 - (d) Claims for damages insured by usual personal injury liability coverage which are sustained (i) by any person as a result of an offense directly or indirectly related to the employment of such person by the Contractor, or (ii) by any other person.
 - (e) Claims for damages because of injury to or destruction of tangible property, including loss of use resulting therefrom.

- 15.2 Certificates of Insurance acceptable to the Owner and naming the Owner as an additional insured shall be filed with the Owner prior to execution of the Contract. Insurance Coverage shall not terminate without due notice to the City of Worthington.
- 15.3 The Contractor shall purchase and maintain, during the duration of the Contract, Comprehensive General and Automobile Liability insurance issued to the Contractor and protecting the Contractor from all claims for personal injury, including death, and all claims for destruction of or damage to property, arising out of or in connection with any operations under the Contract Documents, whether such operations be by the Contractor or by any Subcontractor, or anyone directly or indirectly employed by the Contractor or by a Subcontractor. Insurance shall be written with limits of liability of not less than \$500,000.00 for each person and \$1,000,000.00 for each occurrence for all damages arising out of bodily injury, including death at any time resulting therefrom, and not less than \$500,000.00 for all property damages sustained in any one occurrence and shall include coverage for:
- (a) Claims arising after the Contractor and Subcontractor have completed their work (completed operations and product liabilities coverage).
 - (b) Claims arising from the liability assumed by the Contractor under this Contract including third party beneficiary liability coverage.
 - (c) Claims arising from property damage to wires, conduits, pipes, mains, sewers, tanks, tunnels, any similar property and any apparatus in connection therewith beneath the surface of the ground or water, caused by and occurring during the use of mechanical equipment for the purpose of grading land, paving, excavating, drilling, borrowing, filling, backfilling, tunneling, or pile driving.
 - (d) Claims for property damage arising out of collapse of or structural injury to any building or structure due to grading of land, excavating, borrowing, filling, backfilling, tunneling, pile driving, cofferdam work or caisson work.
- 15.4 In addition, the following coverages shall be provided if the work contemplated by the contract involves such operations:
- (a) Claims for damage to property arising from operations directly or indirectly incident to blasting or explosion, however caused.
 - (b) Claims for damage to property arising out of moving, shoring, underpinning, raising or demolition of any building or structure, or removal or rebuilding of any structural support thereof.
 - (c) Umbrella Excess Liability Insurance to extend existing policies to the required limits will be accepted.

- 15.5 The Contractor shall purchase and maintain, during the Contract Time, All Risk Builders Risk Insurance upon the Project to the full insurable value thereof for the benefit of the Owner, the Contractor, and Subcontractors as their interest may appear. This provision shall in no way release the Contractor or Contractor's Surety from obligations under the Contract Documents to fully complete the Project.
- 15.6 The Contractor shall purchase and maintain, during the Contract Time, in accordance with the provisions of the laws of Ohio, Workers' Compensation Insurance, including occupational disease provisions, for all of the Contractor's employees at the site of the Project and in case any work is sublet, the Contractor shall require such Subcontractor similarly to provide Workers' Compensation Insurance, including occupational disease provisions for all of the latter's employees unless such employees are covered by the protection afforded by the Contractor. In case any class of employees engaged in hazardous work under this contract at the site of the Project is not protected under the Workers' Compensation statute, the Contractor shall provide, and shall cause each Subcontractor to provide, adequate and suitable insurance for the protection of its employees not otherwise protected.
- 15.7 In order to comply with this requirement, the Contractor shall furnish and attach to each executed set of the Contract Documents, a copy of the Workers' Compensation Certificate showing that the Contractor has paid the industrial insurance premium. Renewal certificates shall be furnished as necessary during the life of the Contract.

16.0 Prevailing Wage

- 16.1 The Contractor to whom the work is awarded will be required to pay laborers, workers, mechanics and other employees on the work under this Contract not less than the prevailing wage scale in accordance with Chapter 4115 of the Ohio Revised Code. The Payroll Information and Final Payroll Affidavit forms contained in the Contract Documents shall be filled out as specified in Section 38 of the General Conditions.

17.0 Supplemental General Conditions and Supplemental Specifications

- 17.1 Supplemental General Conditions and Supplemental Specifications, when included, shall supplement and/or modify the General Conditions and Specifications included herein and shall govern whenever there is a conflict in meaning.

18.0 Bonds Accompanying Bid To Be Executed By Authorized Surety

- 18.1 A Bid shall be deemed nonresponsive and shall be rejected if the bidder submits with a bid guaranty, contract bond, payment bond, or combination of such bonds, executed by a surety not licensed, or a surplus lines company not approved, by the Superintendent of Insurance to execute such a bond in the State of Ohio.

19.0 REQUIRED CONTRACT PROVISIONS VS. GENERAL CONDITIONS

19.1 The required contract provisions for federal-aid construction contracts (contained in ODOT's 2023 ODOT Federal Bid Document LPA Template) are hereby incorporated by reference. The following rules and regulations shall apply to all work to be done under this contract. If any provisions of these construction regulations conflict with any other clauses of this contract, the ODOT 2023 ODOT Federal Bid Document LPA Template shall govern.

UTILITY NOTE
FRA-SELBY BLVD WEST BRIDGE; PID 116037
March 14, 2024

“Bidders are advised that the following utility facilities will not be cleared from the construction area at the time of award of the contract. These utility facilities will remain in place or be relocated within the construction limits of the project as set out below.”

AMERICAN ELECTRIC POWER (AEP)

AEP has existing poles and overhead facilities (street lighting) located within the right-of-way, including two poles in conflict with the project.

The City of Worthington is to request removal of the light poles (by AEP). AEP shall begin removal of poles and appurtenances by **May 27, 2024** and will come completed work no later than **May 31, 2024**. Upon completion of the project, the City of Worthington shall request reinstallation.

Paul Paxton
777 Hopewell Drive
Heath, Ohio 43056
740-348-5322
ptpaxton@aep.com
ohfiberrelocate@aep.com
AEP Solution Center 800-277-2177

COLUMBIA GAS

Columbia Gas has existing facilities in the right-of-way that will be in conflict with the proposed structure and foundation.

Columbia Gas is abandoning the gas main in the vicinity of the project limits. The main will be abandoned in place. To maintain service to the neighborhood, Columbia Gas will be installing a temporary facility within existing right of way outside of the project limits. Columbia Gas will start abandonment of the gas main on **April 15, 2024**. Columbia Gas shall abandon the facilities within the project limits no later than **May 31, 2024**. Columbia Gas plans to reinstall the gas main through the project limits after the Contractor completes stage 3 during Stage 4 of the sequence of construction. Contractor shall be required to coordinate the timing of the stage 4 work with Columbia Gas as required to accommodate the gas line installation.

Michael Doran
3350 Johnny Appleseed Ct. Columbus, Ohio 43231
Phone: 614-557-0478
mdoran@nisource.com

CITY OF COLUMBUS Facilities -Water

The City of Columbus has an existing water line within the project limits. Relocation of the waterline is included as part of this project. Contractor will need to coordinate relocation in conjunction with roadway and bridge improvements.

Columbus Division of Water
Timothy Huffman
TEHuffman@columbus.gov
910 Dublin Rd, Columbus, OH, 43215
Office: 614-645-7788

GENERAL COMMENTS

The Contractor shall exercise caution when working in proximity to the existing and/or relocated utility facilities.

Bidders are advised that some utility relocation plans are on file and may be reviewed by sending a request to john.moorehead@worthington.org

Section 3781.30 of the Ohio Revised Code requires among other things, that the contractor protect and preserve the markings of approximate locations of underground utility facilities and to conduct the excavation in the vicinity of underground utility facilities in a careful and prudent manner.

1. STATUS OF RAILROAD OPERATING FACILITIES

None affected.

2. ENCROACHMENTS

There are no improvements or obstructions located within the limits of this project.

3. COMPLIANCE STATEMENT

All right of way acquisitions and all relocation activities, if any, have been done in compliance with 23 CFR 635.309(c)(2) and are also compliant to:

- 42 United States Code, Chapter 61 – The Uniform Act.
- All pertinent federal directives and regulations – to include 49 CFR Part 24.
- The current Real Estate Manual of the Ohio Department of Transportation which has been approved by FHWA.

Right of way remaining to be acquired will be acquired in accordance with FHWA directives.

ODOT LPA CONTRACT PROVISIONS

ODOT's LPA Template (ODOT Spec Book and LPA Spec Book) Required Contract Provisions.

1. ODOT'S 2023 CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND ITS SUPPLEMENTS

ODOT's Construction and Material Specifications (C&MS) and its supplements are hereby incorporated by reference, in their entirety, as if rewritten herein. **The incorporation of this document by reference does not interfere with the order of precedence set forth in Section 105.04 of the C&MS Manual.**

In accordance with the Locally Administrated Transportation Projects Manual of Procedures (LATPM), when bidding this project, the contractor should replace the terms "the department", "the engineer", "the DCE" and "the DCA" with the term "the Local Public Agency (LPA)." Furthermore, nothing in this document is intended to alter the LPA's adherence to Ohio Revised Code, local ordinance or other applicable requirements which are properly established.

2. PN 133 – 10/20/2023 – Products Made in the United States

The requirements of this note replace the domestic material requirements in 106.09 of the Construction & Material Specifications.

This note is automatically inserted into all projects that have federal funding in the construction phase or any prior phase. If there was federal participation in environmental studies, right of way acquisition, preliminary engineering or other phase defined in the environmental document, this note should be included in the proposal.

Furnish products that are made in the United States according to the applicable provisions of the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, which includes the Build America, Buy America Act Pub. L. 117-58, §§ 70901-52.

A. Federal Requirements. All steel or iron products incorporated permanently into the Work must be made of steel or iron produced in the United States and all subsequent manufacturing must be performed in the United States. Manufacturing is any process that modifies the chemical content; physical shape or size; or final finish of a product. Manufacturing begins with the initial melting and mixing and continues through the bending and coating stages. If a domestic product is taken out of the United States for any process, it becomes a foreign source material.

All manufactured products used in the project are not required to be produced in the United States.

All construction materials must be manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

"Construction materials" includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives—that is or consists primarily of:

- Non-ferrous metals;
- Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass (including optic glass);
- Fiber optic cable (including drop cable);
- Optical fiber;
- Lumber;
- Engineered wood; and
- Drywall.

To provide clarity to item, product, and material manufacturers and processors, we note that items that consist of two or more of the listed materials that have been combined together through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. For example, a plastic framed sliding window should be treated as a manufactured product while plate glass should be treated as a construction material.

B. Exceptions. The Director may grant specific written permission to use non-domestic steel or iron products in any type of construction in accordance with 23 CFR 635.410(b)(4). The Director may grant such exceptions under the following condition:

- The cost of products to be used does not exceed 0.1 percent of the total Contract cost, or \$2,500, whichever is greater. The cost is the value of the product as delivered to the project.

The Director may grant specific written permission to use non-domestic construction materials and manufactured products in any type of construction in accordance with 2 CFR Part 184. The Director may grant such exceptions under the following conditions:

- The total value of the non-compliant products is no more than the lesser of \$1,000,000 or 5% of total applicable costs for the project; or
 - applicable costs are defined as the cost of materials (including the cost of any manufactured products) used in the project that are subject to a domestic preference requirement
 - the actual cost of the materials, not the anticipated cost of those materials.
- The total amount of the Federal financial applied to the project, through awards or subawards, is below \$500,000;

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project, but are not an integral part of the structure or permanently affixed to the infrastructure project.

C. Proof of Domestic Origin. Furnish certification to the Engineer showing the domestic origin of all products covered by this section before they are incorporated into the Work. The Daily Source Report form itself is not acceptable certification of domestic origin. Non-domestic product(s) incorporated into the Work does not relieve the Contractor of any responsibility to correct the Work up to and including removal and replacement of the non-domestic product(s). Products without a traceable domestic origin will be treated as a non-domestic product.

3. CERTIFICATION AGAINST DEBARMENT AND SUSPENSION

The bidder hereby certifies by signing this proposal that, except as noted below, under penalty of perjury and under other such penalties as the laws of this state and the United States of America provide, that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds is **not** currently under suspension, debarment, voluntary exclusion or determination of ineligibility by any federal agency; that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds has **not** been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three (3) years; that the company or any person associated therewith in the capacity of owner, partner, director, manager, auditor, or any position involving the administration of federal funds does **not** have a proposed debarment pending; that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator has **not** been indicted, convicted, or had a civil judgment rendered against the company or themselves by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

If there are exceptions to any of the above clauses, please include a statement with the bid package detailing these exceptions.

Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. For any exception noted, indicate below to whom it applies, initiating agency and dates of action. Providing false information may result in criminal prosecution or administrative sanctions. Execution of this proposal on the signature portion thereof shall also constitute signature of this certification as permitted by Title 28 United States Code, Section 1746.

4. PREQUALIFICATION

Only prequalified contractors are eligible to submit bids for this project. Prequalification status must be in force **at the time of bid, at the time of award, and through the life of the construction contract.** For work types that ODOT does not prequalify, the LPA must still select a qualified contractor. Subcontractors are not subject to the prequalification requirement. The “prime” contractor must perform no less than 30 percent of the total original contract price.

5. PN 033 - 4/18/2008- AS PER PLAN DESIGNATION

(Not required by FHWA, but strongly suggested if As Per Plan is used by the LPA)

The “As Per Plan” designation is sometimes added to item descriptions in the proposal to assist contractors with easily identifying standard items that have been altered by plan notes.

The “As Per Plan” designation has proven to be a very useful tool for the contractors. However, its use was never intended to relieve the contractors of their responsibility to read, bid, and construct all items in accordance with all governing plan notes. Therefore, the absence of an “As Per Plan” designation on some item descriptions in the proposal for which there are clear and controlling plan notes does not relieve the contractors of the responsibility to read, bid, and construct those particular items in accordance with the governing plan notes.

Be advised that the item descriptions in the bidding proposal must be read or interpreted with the governing plan notes and the Construction and Material Specification Manual. A claim based upon an “order of precedence” basis will be denied. In the event that a conflict, either real or perceived, exists between the item description and the governing plan note, the contractors are to request clarification through the pre-bid process.

6. FEDERALLY REQUIRED EQUAL EMPLOYMENT OPPORTUNITY (EEO) CERTIFICATION FORM

The bidder hereby certifies that he or she **has**, **has not**, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that he or she **has**, **has not**, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. **The bidder must circle the appropriate “has” or “has not” above.**

7. PN 017 - 10/15/2004 - FEDERALLY REQUIRED EEO CERTIFICATION CLAUSE

The Federally Required EEO Certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)) and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

8. PN 026 - 10/15/2004 - CERTIFICATION OF NON-SEGREGATED FACILITIES

- A. Certification of Non-segregated Facilities, as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities (for a Federal-aid highway construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause).
- B. Bidders are cautioned as follows: By signing this bid, the bidder has agreed to the provisions of the "Certification of Non-segregated Facilities" in this proposal. This certification provides that the bidder does not maintain or provide for his or her employees' facilities which are segregated on a basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the bidder will not maintain such segregated facilities.
- C. Bidders receiving Federal-aid highway construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, will be required to provide for the forwarding of the following notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

"Notice to Prospective Subcontractors and Material Suppliers of Requirement for Certification of Non-segregated Facilities" -

- A. A Certification of Non-segregated Facilities as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, which is included in the proposal, or attached hereto, must be submitted by each subcontractor and material supplier prior to the award of the subcontract or consummation of a material supply agreement if such subcontract or agreement exceeds \$10,000 and is not exempt from the provisions of the Equal Opportunity clause.
- B. Subcontractors and material suppliers are cautioned as follows: By signing the subcontract or entering into a material supply agreement, the subcontractor or material supplier will be deemed to have signed and agreed to the provisions of the "Certification of Non-segregated Facilities" in the subcontract or material supply agreement. This certification provides that the subcontractor or material supplier does not maintain or provide for his or her employees facilities which are segregated on the basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the subcontractor or material supplier will not maintain such segregated facilities.
- C. Subcontractors or material suppliers receiving subcontract awards or material supply agreements exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

9. PN 003 - 10/15/2004 - TITLE VI RELATED STATUTES NON-DISCRIMINATION STATEMENT

The LPA, under Title VI of the Civil Rights Act and related statutes, ensures that no person within the LPA shall on the grounds of race, color, national origin, sex, disability, or age be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

10. CERTIFICATION OF COMPLIANCE WITH AFFIRMATIVE ACTION PROGRAMS

In accordance with Ohio Administrative Code §9.47, before any Contract is awarded, the LPA will require the Bidder to furnish a valid Certificate of Compliance with Affirmative Action Programs, issued by the State EEO Coordinator dated prior to the date fixed for the opening of bids.

11. PN 020- 10/21/2022- NOTICE OF REQUIREMENT OF AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY AND WORKFORCE DIVERSITY REQUIREMENTS ON ALL FEDERALLY FUNDED PROJECTS (CLOSE MONITORING AND ENFORCEMENT CURRENTLY APPLIES TO PROJECT AMOUNT GREATER THAN \$10M ONLY).¹ PLEASE NOTE THAT ODOT MAY REQUEST INFORMATION AT ANY TIME FOR PROJECTS UNDER \$10M, AS NEEDED.

The bidder’s attention is called to the affirmative action obligations required by the specifications set forth in 23 CFR Part 230, 41 CFR Part 60, Executive Order 11246, Section 503, and the affirmative action provisions of Vietnam Era Veterans' Readjustment Assistance Act (VEVRAA) of 1974.

WORKFORCE UTILITATION GOALS

Utilization goals applicable to the project, expressed in percentages, for minority and female participation for each construction craft can be found on ODOT’s website at **Contracts | Ohio Department of Transportation.** These goals are based on 2020 census data and represent the area, per craft, minority, and female availability pool.

- **Census Availability Percentages for minority and female workers** by craft per county (applicable to project):
<http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Construction/CensusForAllCounties.xlsx>
<http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Construction/CensusForAllCounties.pdf>
- **Statewide utilization obligations/ goals for minority workers** by county (applicable to each project).
- **Statewide utilization obligation/ goal for female workers is 6.9%** and applies the same for each county.

Source: US Department of Labor’s, Office of Federal Contract Compliance Programs, Technical Assistance Guide for Construction Contractors (pp. 126 – 127)

Construction Contractors Technical Assistance Guide (dol.gov)

Ohio 064 Youngstown-Warren, OH:

SMSA (Standard Metropolitan Statistical Area) Counties:

9320 Youngstown - Warren, OH	9.4
OH Mahoning; OH Trumbull.	
Non-SMSA Counties	6.7
OH Columbiana; PA Lawrence; PA Mercer.	

065 Cleveland, OH:

SMSA Counties:

0080 Akron, OH	7.8
OH Portage; OH Summit.	
1320 Canton, OH	6.1
OH Carroll; OH Stark.	
1680 Cleveland, OH	16.1
OH Cuyahoga; OH Geauga; OH Lake; OH Medina.	
4440 Lorain-Elyria, OH	9.3
OH Lorain.	
4800 Mansfield, OH	6.3
OH Richland.	
Non-SMSA Counties:	11.3

¹ All Federally Funded projects greater than \$10K are required to meet the workforce requirements; however close monitoring and enforcement of those over \$10M are defined by ODOT regularly tracking hiring progress with quarterly workforce utilization reports provided to district and contractor staff at progress meetings along with submission of Good Faith Efforts, at the end of a project. GFEs are only requested in the event of a shortfall in female and minority workforce percentages.

OH Ashland; OH Ashtabula; OH Coshocton; OH Crawford; OH Erie;
OH Holmes; OH Huron; OH Tuscarawas; OH Wayne.

066 Columbus, OH:

SMSA Counties:

1840 Columbus, OH _____ 10.6
OH Delaware; OH Fairfield; Franklin; OH Madison; OH Pickaway.

Non-SMSA Counties _____ 7.3

OH Athens; OH Fayette; OH Guernsey; OH Hocking; OH Jackson; OH Knox;
OH Licking; OH Marion; OH Meigs; OH Morgan; OH Morrow; OH Muskingum;
OH Noble; OH Perry; OH Pike; OH Ross; OH Scioto; OH Union; OH Vinton.

067 Cincinnati, OH:

SMSA Counties:

1640 Cincinnati, OH-KY-IN _____ 11.0

IN Dearborn; KY Boone; KY Campbell; KY Kenton; OH Clermont; OH Hamilton;
OH Warren.

3200 Hamilton - Middletown, OH _____ 5.0

OH Butler.

Non-SMSA Counties _____ 9.2

IN Franklin; IN Ohio; IN Ripley; IN Switzerland; KY Bracken; KY Carroll;
KY Fleming; KY Gallatin; KY Grant; KY Lewis; KY Mason; KY Owen;
KY Pendleton; KY Robertson; OH Adams; OH Brown; OH Clinton; OH Highland.

068 Dayton, OH:

SMSA Counties:

2000 Dayton, OH _____ 11.5
OH Greene; ON Miami; OH Montgomery; OH Preble.

7960 Springfield, OH _____ 7.8

OH Champaign; OH Clark.

Non-SMSA Counties _____ 9.9

OH Darke; OH Logan; ON Shelby.

069 Lima, OH:

SMSA Counties:

4320 Lima, OH _____ 4.4

OH Allen; OH Auglaize; OH Putnam; OH Van Wert.

Non-SMSA Counties _____ 3.5

OH Hardin; OH Mercer.

070 Toledo, OH:

SMSA Counties:

8400 Toledo, OH-MI _____ 8.8

MI Monroe; OH Fulton; OH Lucas; OH Ottawa; OH Wood.

Non-SMSA Counties _____ 7.3

MI Lenawee; OH Hancock; OH Henry; OH Sandusky; OH Seneca; OH Wyandot.

The New Hire Definition for the purposes of on-the-job training and workforce utilization is as follows:

An individual who has a break in service (not on an employer's payroll) for a period of twelve (12) months or longer and the person affected is not a salaried employee but belongs to a union craft. Individuals compensated for training or incidental work which does not cause a break in unemployment compensation, i.e., paid by voucher check or petty cash, are considered new hires if the individual's break in service is twelve (12) months or longer.

The time frame for a new hire shall be associated with the first project worked for that contractor regardless of whether it is public or private. When reporting a newly hired employee, the contractor shall identify that employee as a new hire on that specific project only. Subsequent work, barring a break in service of twelve (12) months or more, would not qualify the employee as a new hire for that contractor.

Compliance: The contractor's compliance shall be based on the implementation of affirmative action obligations required by the specifications set forth in 23 CFR Part 230, and its good faith efforts to meet these obligations. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and females on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the affirmative action obligations shall be a violation of the contract and regulations in 23 CFR Part 230. The good faith efforts put forth by the contractor will be measured against the total work hours performed.

Under FHWA, ODOT is the authority tasked with ensuring that the contractor adheres to the aforementioned regulations. In addition to complying with the Required Contract Provisions, the contractor shall provide immediate written notification to ODOT when referral practices of the union(s) with which the contractor has a collective bargaining agreement impede the company's efforts to meet its equal opportunity obligations.

The U.S. Department of Labor, Office of Federal Contract Compliance Programs (OFCCP), administers and enforces equal employment opportunity laws that apply to Federal government contractors and subcontractors supplying goods and services, including construction, to the Federal Government under 41 CFR Part 60, Executive Order 11246, Section 503, and the affirmative action provisions of VEVRAA. The OFCCP monitors compliance with these laws primarily through compliance evaluations, during which a compliance officer examines the contractor's affirmative action efforts and employment practices. Under Executive Order 11246, the OFCCP may perform contract compliance reviews on contractors involved with federally funded ODOT projects.

Requirements for affirmative action obligations governing OFCCP contract compliance reviews are those listed in the Federal Register for the Economic Area.

Federal Register :: Government Contractors, Affirmative Action Requirements (2000)

Federal Register :: RIN 1250-AA10 (2020 updates)

ADDITIONAL REQUIREMENTS FOR ODOT PROJECTS WITH STATE FUNDING

The Ohio Department of Development (ODOD), Minority Business Division, is responsible for ensuring state contractors implement and adhere to the State of Ohio's affirmative action program pursuant to Ohio Administrative Code (OAC) 123: Chapters 123:2-3-01 through 123:2-3-07. Specifically, this unit's responsibilities includes the issuance of certificates of compliance under ORC 9.47 and 153.08, conducting project site visits, and compliance reviews (desk audits) to ensure contractors utilize minorities and women in the construction trades, and maintain a working environment free of discrimination, harassment, and intimidation. The ODOD may perform contract compliance reviews on contractors involved with state or state assisted projects. Requirements for affirmative action obligations governing ODOD contract compliance reviews are those listed in OAC 123:2-3-02, for the Metropolitan Statistical Area in which a project is located.

All prime and subcontractors regardless on the number of employees or the state contract amount are required to submit monthly utilization reports (Input Form 29) to the Ohio Department of Development covering the contractor's total workforce within the state of Ohio (private sector and public sector projects). The reports must be filed electronically by the 10th of each month, beginning with the contract award and continuing until the contractor or subcontractor completes performance of the contract, as set forth in OAC 123:2-9-01.

I-29 monthly reports must be submitted via the Ohio Business Gateway portal: <https://ohio.gov/wps/portal/gov/site/business/resources/ohio-business-gateway> / [Ohio Business Gateway | Ohio.gov](#) | [Official Website of the State of Ohio](#)

Steps to Submit the I-29 Form:

1. Visit Ohio Business Gateway
2. Log in using username and password (OH|ID)
3. Ensure "Equal Opportunity Division" is among available service areas
4. Ensure "Input 29" is among available transactions
5. Select "Input 29" and complete the form
6. Click "File" button on the Summary page to see a confirmation page
7. Submit supporting documentation (if required) to: das-eod.bccu@das.ohio.gov

I-29 reports are used by ODOT to create monthly utilization work hour reports to monitor adherence to on-the-job training requirements and workforce diversity requirements. Prime contractors and subcontractors shall provide monthly utilization work hour reports for the contractor's or subcontractor's total workforce within the state of Ohio to the compliance officer of the contracting agency (ODOT). A contractor's or subcontractor's failure to submit a monthly utilization work hour report shall be a basis for invoking any of the sanctions set forth in rule 123:2-7-01 of the Ohio Administrative Code.

12. PN 059 - 10/15/2004 - WAGE DETERMINATION APPEALS PROCESS

1. Has there been an initial decision in the matter? This can be:
 - * An existing published wage determination
 - * A survey underlying a wage determination
 - * A Wage and Hour Division letter setting forth a position on a wage determination matter
 - * A conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response for this initial contact is not satisfactory, the process described in 2.) and 3.) should be followed.

Regarding any other matter not yet ready for the formal process described within this section, initial contact should be made with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determination
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D. C. 20210

2. If the answer to the question in 1.) is yes, an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (see 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U. S Department of Labor
200 Constitution Avenue, N.W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requester considers relevant to the issue.

3. If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4. All decisions by the Administrative Review Board are final.

13. PN 061 –10/22/2012- WAGE SCALE ON ALL FEDERAL-AID PROJECTS

The wage rates for this project were determined by the Secretary of Labor in accordance with Federal-Aid requirements. The LPA must formally incorporate them into the contract documents.

Contractors shall use only the classifications and wage rates set forth in the United States Department of Labor (USDOL) wage decision found at the website noted below on payrolls submitted to the ODOT District Office. Additionally, please note that the wage modification in effect at the time of the project sale date shall be used by all contractors.

This USDOL wage decision may be viewed by accessing the United States Department of Labor (USDOL) website at: <https://sam.gov/content/wage-determinations>

This contract requires the payment of the total of the basic hourly rates plus the fringe benefits payments for each classification in accordance with the following regulations which by reference are made part of this contract:

- 1) The U.S. Department of Labor Regulations, Title 29, Subtitle A, Part 5, Sections 5.5, 5.31, and 5.32, most recent revision at contract execution.
- 2) Form FHWA-1273 (most recent revision at contract execution) Part IV. Payment of Predetermined Minimum Wage and Part V. Statements and Payrolls. (Form FHWA-1273 shall be physically incorporated in all contracts, subcontracts, and lower-tier subcontracts.)

The failure to pay prevailing wages to all laborers and mechanics employed on this project shall be considered a breach of contract. Such a failure may result in the termination of the contract and debarment.

The contractor and all subcontractors shall pay all wages and fringe benefits by company funds transfer or legal tender. All payroll records and company funds transfer transactions or legal tender transactions shall be maintained for at least three (3) years after final acceptance as defined in Section 109.12 of the ODOT C&MS. The contractor's and all subcontractor's payroll records and canceled pay checks shall be made available for inspection by the Department and the U.S. Department of Labor, upon request, anytime during the life of the contract, and for three (3) years thereafter by the U.S. Department of Labor. Additionally, the contractor and all subcontractors shall permit such representatives to interview any employees during working hours while the employee is on the job.

The wage and fringe rates determined for this project shall be posted by the contractor in a prominent and accessible place on the project, field office, or equipment yard where they can be easily read by the workers.

The contractor and all subcontractors shall submit to the District Construction Office certified payrolls each week beginning three (3) weeks after the start of work. These payrolls shall be on a Form WH-347 or equivalent and shall show the following:

1. Employee name, address, classification, and hours worked.
2. The basic hourly and overtime rate paid, total pay, and the manner in which fringe benefit payments have been irrevocably made.
3. The project number and pay week dates.

4. Original signature of a company officer on the certification statement.

Additionally, a copy of the "Apprentice Certification" obtained from the Ohio State Apprenticeship Council must accompany all certified payrolls submitted for all apprentices working on this project.

Please be aware it is ultimately the responsibility of the contractor to ensure all laws relating to prevailing wages in the USDOL Regulations, Title 29, parts 1 and 5, are strictly adhered to by all subcontractors on the project.

If the contractor or any subcontractor fails to comply with any of the provisions contained in this proposal note, the Department may terminate the contract, debar the contractor or subcontractor, and/or withhold or suspend pay estimates after written notice and a reasonable opportunity to comply has been provided.

The applicable wage and fringe rates for this project are to be incorporated in their entirety as an attachment to the executed contract.

14. LIMITATION ON USE OF CONTRACT FUNDS FOR LOBBYING

- A. The prospective bidder certifies, by signing and submitting this bid proposal, to the best of his or her knowledge and belief that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.

- B. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. This certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

- C. The prospective bidder also agrees by submitting his or her bid proposal that he or she shall require the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such subcontractors shall certify and disclose accordingly.

15. PN 045 - 10/15/2004 - NON -COLLUSION AFFIDAVIT

In accordance with Title 23 USC, Section 112 and ORC, Chapter 1331 et. seq: and Sections 2921.11 and 2921.13, the bidder hereby states, under penalty of perjury and under other such penalties as the law provides, that he/she or his/her agents or employees have not entered, either directly or indirectly, into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal. Execution of this proposal on the signature portion thereof shall also constitute signature of this Non-Collusion Affidavit as permitted by title 28 USC, Section 1746.

REPORTING BID RIGGING

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially, and caller anonymity will be respected.

16. PN 014 - 10/15/2004 - DRUG-FREE WORKPLACE

The prime contractor agrees to comply with all applicable state and federal laws regarding drug-free workplace. The prime contractor shall make a good faith effort to ensure that all its employees while working on this project will not purchase, transfer, use, or possess illegal drugs or alcohol or abuse prescription drugs in any way.

The prime contractor shall also require this contractual obligation be placed in all subcontractor and materialman contracts it enters into and further requires all subcontractors and materialmen place the same contractual obligations in each of their lower-tier contracts.

17. PN 034 - 05/25/2011 – DRUG FREE SAFETY PROGRAM

During the life of this project, the contractor and all its subcontractors who provide labor on the project site must be enrolled in and remain in good standing in the Ohio Bureau of Worker's Compensation (OBWC) Drug-Free Safety Program (DFSP) or a comparable program approved by the OBWC.

In addition to being enrolled in and in good standing in an OBWC-approved DFSP or a comparable Drug Free Workplace Program (DFWP) approved by the OBWC, the LPA requires each contractor and subcontractor that provides labor to subject its employees who perform labor on the project site to random drug testing of five (5) percent of its employees. The random drug testing percentage must also include the on-site supervisors of the contractors and subcontractors. Upon request, the contractor and subcontractor shall provide evidence of required testing to the LPA.

Each subcontractor shall require all lower-tier subcontractors who provide labor on the project site with whom the subcontractor is in contract for the work to be enrolled in and be in good standing in the OBWC DFSP or an OBWC-approved DFWP prior to a lower-tier subcontractor providing labor at the site.

The LPA will declare a bid non-responsive and ineligible for award if the contractor is not enrolled in and in good standing in the OBWC's DFSP Discount Program or a similar program approved by the OBWC within eight (8) days of the bid opening. Furthermore, the LPA will deny all requests to sublet when the subcontractor does not comply with the provisions of this proposal note.

Failure of the contractor to require a subcontractor to be enrolled in and be in good standing in the OBWC DFSP or an OBWC-approved DFWP prior to the time the subcontractor provides labor at the site shall result in the contractor being found in breach of the contract and that breach shall be used in the responsibility analysis of that contractor or the subcontractor who was not enrolled in a program for future contracts with the State for five (5) years after the date of the breach.

18. OHIO WORKERS' COMPENSATION COVERAGE

The contractor must secure and maintain valid Ohio workers' compensation coverage until the project has been finally accepted by ODOT. A certificate of coverage evidencing valid workers' compensation coverage must be submitted to the LPA before the contract will be executed by the LPA.

The contractor must immediately notify the LPA in writing if it or any subcontractor fails or refuses to renew their workers' compensation coverage. Furthermore, the contractor must notify the LPA in writing if its or any of its subcontractor's workers' compensation policies are canceled, terminated, or lapse.

The failure to maintain valid workers' compensation coverage shall be considered a breach of contract which may result in the contractor or subcontractor being removed from the project, withholding of pay estimates, and/or termination of the contract.

19. PN 038 - 10/15/2004 - UNRESOLVED FINDING FOR RECOVERY

The contractor affirmatively represents to the LPA that it is not subject to a finding for recovery under ORC §9.24, or that it has taken the appropriate remedial steps required under §9.24 or otherwise qualifies under that section. The contractor agrees that if this representation is deemed to be false, the contract shall be void ab initio as between the parties to this contract, and any funds paid by the state hereunder shall be immediately repaid to the LPA, or an action for recovery may be immediately commenced by the LPA and/or for recovery of said funds.

20. PN 039 - 10/15/2004 - ASSIGNMENT OF ANTITRUST CLAIMS IN STATE CONTRACT LANGUAGE

The contractor should recognize that in actual economic practice, overcharges resulting from antitrust violations are usually borne by ODOT and/or the LPA. As consideration for the Award of the Contract and intent to be legally bound, the contractor acting herein by and through the person signing this contract on behalf of the contractor as a duly authorized agent, hereby assigns, sells, conveys, and transfers to ODOT and/or the LPA any and all right, title, and interest to any and all claims and causes of action the contractor now has or hereafter requires under state or federal antitrust laws provided the claims or causes of action related to the goods or services are the subject to the contract. In addition, the contractor warrants and represents that it will require all of its subcontractors and first-tier suppliers to assign all federal and state antitrust claims and causes of action to ODOT and/or the LPA. The provisions of this article shall become effective at the time the LPA executes this contract without further acknowledgment by any of the parties.

All contracting entities shall assign their rights and responsibilities to ODOT and/or the LPA for all antitrust claims and causes of action regarding subcontractors.

21. PN 024 – 04/21/2006 – US ARMY CORPS OF ENGINEERS AND OHIO ENVIRONMENTAL PROTECTION AGENCY PERMITS

The above referenced permits are incorporated and made a part of this contract as special provisions incorporated herein. Therefore, in the event the contractor or its agents refuse or fail to adhere to the requirements of the US Army Corps of Engineers 404 Permit and/or the Ohio Environmental Protection Agency's 401 Water Quality Certification and an assessment or fine is made or levied against ODOT and/or the LPA, the contractor shall reimburse the Department within thirty (30) calendar days of the notice of assessment or fine, or the Department may withhold the amount of the fine from the contractor's next pay estimate. All money collected or withheld from the contractor shall be delivered to the permitting agencies issuing the assessment or fine.

These fines are not to be construed as a penalty but are liquidated damages to recover costs assessed against the Department due to the contractor's refusal or failure to comply with the permits.

22. PN 007 – 1/31/2021- DBE TRUCKING

Title 49 CFR Section 26.55(d)(4)(5)(6) governs trucking operations.

The Disadvantaged Business Enterprise (DBE) trucking firm must be able to quote and negotiate its own prices. The DBE trucking firm must also provide a quote for each project on which the firm is to be utilized toward the project DBE goal.

The DBE will be responsible for the management and supervision of their trucking operation on each contract. A DBE is not performing a Commercially Useful Function (CUF) if the contract exists for the purpose of creating the appearance of DBE participation.

The DBE must own and operate at least one fully licensed, insured, and operational truck used on the contract.

The DBE receives credit for the total value of the transportation services the DBE provides on the contract using trucks the DBE owns, insures, and operates using drivers it employs (not 1099/independent contractors).

The DBE may lease trucks on a long-term basis (a year or more) and receive full DBE credit as long as employees of the DBE operate the truck.

A lease must indicate the DBE has exclusive use of and control over the truck, including responsibility of maintenance and insurance. This does not preclude the leased truck from working for others during the term of the lease with the DBE's consent as long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the DBE's name and identification number as well.

The DBE must carry a copy of the lease agreement in the leased truck when working onsite.

Truck Monitoring:

Credit for expenditures with DBEs for materials or supplies toward the DBE goal is described as follows:

1. A DBE firm may be a regular dealer in bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business if the firm both owns and operates distribution equipment for the products. Any supplementation of a regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.
2. When the materials or supplies are obtained from a DBE Materials and Supplies Vendor (MSV) manufacturer the prime contractor may receive credit for 100 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
3. When the materials or supplies are purchased from a DBE MSV regular dealer or supplier, the prime contractor may receive credit for up to 60 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a regular dealer or supplier is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

Historically, 60% of the cost of materials and supplies purchased from a DBE MSV (100% from a DBE MSV manufacturer) would normally be counted toward DBE goals. Effective September 1, 2018:

- Prime contractors must obtain information about the method of procurement for each item to be procured from a DBE MSV. The DBE Affirmation Form has been modified to accommodate this information.

- To be eligible to receive 100% credit toward DBE goals for a materials and supplies subcontract:
 - The DBE MSV must be certified with the correct (manufacturer) NAICS code for the item
 - The DBE MSV must be certified with the correct descriptor for the item
 - The role the DBE MSV will play on the specific procurement in question must be consistent with the manufacture of the item, as indicated by the information provided by the DBE MSV

- To be eligible to receive 60% credit toward DBE goals for a materials and supplies subcontract:
 - The DBE MSV must be certified with the correct (wholesale or retail) NAICS code for the item
 - The DBE MSV must be certified with the correct descriptor for the item
 - The role the DBE MSV will play on the specific procurement in question must be consistent with the regular sale or lease of the item, as indicated by the information provided by the DBE MSV
 - The item must not be drop-shipped

- The above scenario applies to both bulk items (petroleum products, steel, cement, gravel, stone, asphalt, and others that ODOT may consider to be bulk items) and non-bulk items. For bulk items, there is an additional scenario whereby a contract with a DBE MSV could receive 60% credit. To be eligible to receive 60% credit toward DBE goals for a bulk item materials and supplies subcontract:
 - The DBE MSV must be certified with the correct (wholesale or retail and trucking) NAICS codes for the item
 - The DBE MSV must be certified with the correct descriptor for the item
 - The role the DBE MSV will play on the specific procurement in question must be consistent with the regular sale or lease of the item, as indicated by the information provided by the DBE MSV
 - The DBE MSV must deliver the bulk item from a non-DBE vendor to the prime contractor using distribution equipment that it both owns [or for which it has a long-term (1 year or more) lease] and operates with its regular (not ad hoc) employees

- If not eligible for 100% or 60% credit, an item may still be eligible for credit toward DBE goals, but only for the fee or commission the DBE MSV receives for its services, and only if the following additional criteria are met:
 - The DBE MSV must be certified with NAICS code 425120 Wholesale Trade Agents and Brokers
 - The DBE MSV must convincingly explain how the prime contractor benefits by transacting business with it rather than directly with the non-DBE vendor from which the DBE MSV is re-selling

- The usual good faith efforts process applies.
- All credit toward DBE goals is conditional. Actual credit will be determined based upon invoices, receipts, and/or transportation documents/bills of lading, which must be submitted to ODOT as they are received throughout the course of the project.

DBE TRUCKING DISCLOSURE AFFIDAVIT

In order to ensure the prime contractors are monitoring DBE trucking/hauling operations on projects with federal funding, prime contractors must complete the DBE Trucking Disclosure Affidavits Section (“Affidavit”) when completing and submitting the Prompt Payment Spreadsheet for reimbursement. The Affidavit will be completed by the prime contractor on the Prompt Payment Spreadsheet and, once submitted, will be routed to the project’s SharePoint site. This information will be used to affirm DBE and non-DBE trucking utilized by each DBE firm performing those duties during the previous month. The LPA and ODOT will monitor trucking with the following requirements for all Local-let projects:

- Prime contractors will be required to provide a master list of all anticipated DBE trucking firms to the District Construction Monitor (DCM) at the time of the Pre-Construction Meeting.
 - If no DBE trucking is anticipated on a project, the prime contractor will check the box “No Anticipated DBE Trucking Affidavit” on the first submittal of the Prompt Payment Spreadsheet. If DBE trucking/hauling does occur, the prime contractor must notify the LPA within seven (7) days of the DBE trucking activity. The prime contractor will then complete the Affidavits as required below on each Prompt Payment Spreadsheet.
- Prime contractors will be required to complete the Affidavit disclosing the DBE trucking operations during the previous month when completing the new Prompt Payment Spreadsheet. The prime contractor will complete the Trucking Affidavit section on the Prompt Payment Spreadsheet on each reimbursement submittal. The prime contractor will select one of the following options on the Trucking Affidavit section of the form.
 - The DBE firm performed trucking by utilizing their own equipment and workforce and/or work was subcontracted to another DBE (i.e., only trucking that can be counted for DBE participation was utilized).
 - No other information is required. The prime contractor will sign and submit the Affidavit.
 - The DBE firm utilized DBE & Non-DBE trucking.
 - If selected, the prime contractor will provide a list of non-DBE trucking that was utilized (i.e., not all trucking will earn DBE credit).
 - No trucking was performed.
 - No other information is required. The prime contractor will sign and submit the Affidavit.
- The DCM will perform a check of the Affidavit when reviewing the Prompt Payment Spreadsheet when submitted for reimbursement. The LPA and/or Compliance Managers will follow up on any red flags. For example, if the LPA compares information collected during the CUF process with the affidavit and sees any discrepancies. (Prompt Payment, DBE Tracking and CUF | Ohio Department of Transportation)
- Trucking will continue to be monitored at project sites by construction field staff and the LPAs.

SANCTIONS AND ADMINISTRATIVE REMEDIES

Failure by the prime contractor to follow the DBE Trucking Disclosure Affidavit requirements may result in the issuance of sanctions as follows:

- 1st Level Occurrence: The Department will issue a Letter of Reprimand to the contractor (applies if there is a failure to submit the Affidavits and/or the Affidavits are not submitted timely; if the prime contractor completes the No Anticipated DBE Trucking Affidavit, utilizes DBE trucking, and does not notify the LPA within seven (7) days of the activity).

- 2nd Level Occurrence: The Department may withhold an estimate in the amount due to the DBE trucking firm the Affidavit was not submitted for (applies if there is a failure to submit the Affidavits and/or the Affidavits are not submitted timely; if the prime contractor completes the No Anticipated DBE Trucking Affidavit, utilizes DBE trucking and does not notify the LPA within seven (7) days of the activity).
- 3rd Level Occurrence: If a pattern of not submitting the Affidavit(s) persists or the contractor has falsified, misrepresented, or withheld information; ODOT can pursue other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to the following:

- The contractor’s past project practices,
- The magnitude and the type of offense,
- The degree of the contractor’s culpability,
- Any steps taken to rectify,
- The contractor’s record of performance on other projects, and
- The number of times the contractor has been previously sanctioned by ODOT.

DBE MSV DIRECTORY - <http://www.dot.state.oh.us/Divisions/ODI/SDBE/Pages/DBE-Directory.aspx> (select MSV only)

DBE AFFIRMATION FORM - The new DBE Affirmation Form is now available at [DBE Affirmation Form - Projects Sold on or after 9/1/18 | Ohio Department of Transportation.](#)

Opening Prompt Payment (PP) Spreadsheet (Trucking Affidavit Section on PP Spreadsheet) through GoFormz:

1. Obtain a MyODOT account
 - a. Click [Link](#)
 - b. Click “Launch MyODOT”
 - c. Click: “Click Here”
 - d. Complete Account Application under “Request an Account”
2. Getting GoFormz Access
 - a. Email GoFormz.Help@dot.ohio.gov put Create GoFormz Account in the subject line
 - b. Login for GoFormz will be emailed back
 - c. Click www.goformz.com

Additional guidance can be found by Clicking Here

23. PN 013 – 10/20/23 DISADVANTAGED BUSINESS ENTERPRISE (DBE) UTILIZATION PLAN AND GOOD FAITH EFFORTS – LPA Projects

DEFINITION OF *DAYS*

Unless otherwise noted, *days* means calendar days, but in computing any period of time described in this proposal note, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal or State holiday. See <https://www.opm.gov/policy-data-oversight/pay-leave/federal-holidays> for a list of Federal holidays. State holidays are those designated in division (A) of section 124.19 of the Revised Code (<https://codes.ohio.gov/ohio-revised-code/section-124.19>), with modifications as designated in the first two sentences of division (B)(4) of section 124.18 of the Revised Code (<https://codes.ohio.gov/ohio-revised-code/section-124.18>). (State holidays are generally the same as Federal holidays.)

DBE UTILIZATION PLAN

The bidder's DBE Utilization Plan **must be submitted by the bidder prior to bid opening at https://odot.formstack.com/forms/dbe_copy**. By submitting a DBE Utilization Plan, the Bidder affirms it will be using the DBE firms identified in the Utilization Plan to meet the DBE contract goal. The Bidder further affirms it will not deviate from the Utilization Plan without ODOT's prior written consent.

Unless the bidder is a certified DBE firm, **a bid opened without a DBE Utilization Plan submitted prior to bid opening will be deemed unresponsive.**

The DBE Utilization Plan shall include the following information:

1. The names of the certified DBE firms(s) that will be used to meet the DBE goal
2. A description of the work each DBE will perform. To count toward meeting a goal, each DBE firm must be certified in a NAICS code applicable to the kind of work the firm would perform on the contract
3. Whether the DBE firms(s) being used to meet the goal will be utilized as a subcontractor, regular dealer, manufacturer, consultant, or other capacity
4. The dollar amount of the participation of each DBE firm used to meet the DBE goal.

PROJECTS AWARDED ON ALTERNATES

In the event the project is awarded on alternates, which increases or decreases the total dollar amount of the bid, a revision to the DBE Utilization Plan and DBE Affirmation Form(s) shall be submitted and approved by the Office of Business & Economic Opportunity within five (5) days after the notification of the alternates.

DBE AFFIRMATION

The Apparent Low Bidder (ALB) shall ensure the DBE firms being utilized to meet the DBE goal affirm their participation in the bid within five (5) days after the bid opening to ODOT. The contract dollar amount(s) and/or DBE firm(s) included in the ALB's DBE Utilization Plan must match the contract dollar amount(s) and/or DBE firm(s) included on the DBE Affirmation Form(s). If the contract dollar amount(s) and/or DBE firm(s) do not match, the ALB shall utilize the Request for Consent to Terminate/Reduce a DBE Commitment form located at [DBE Commitment Reduction or Termination Form | Ohio Department of Transportation](#) and submit for review and approval by the Office of Business & Economic Opportunity within five (5) days of the bid opening.

The ALB shall utilize the DBE Affirmation Form located at [DBE Affirmation Form - Projects Sold on or after 9/1/18 | Ohio Department of Transportation](#). The DBE Affirmation Form will be utilized as written confirmation from each listed DBE firm that it is participating in the contract in the type and amount of work provided in the bidder's DBE Utilization Plan. The ALB shall submit a separate DBE Affirmation Form for each DBE it is utilizing for the DBE goal as well as their Good Faith Efforts package if they were not able to attain the DBE Goal via DBE participation.

All other bidders shall submit a DBE Affirmation Form(s) if notified the information is required in order for ODOT to complete its assessment. Bidders shall have five (5) days from the date of notification to submit all required DBE Affirmation Forms to ODOT. Notification will be by email.

In the event a DBE firm fails to confirm the information contained in the DBE Affirmation Form within five (5) days of bid opening, the ALB shall submit a Request for Consent to Terminate/Reduce a DBE Commitment form, as set forth herein. The Request for Consent to Terminate/Reduce a DBE Commitment form shall be submitted within five (5) days after bid opening in order for the ALB to still be considered for contract award. The ALB shall include as its reason for termination the DBE firm's failure to provide a timely affirmation and should include all efforts the ALB made to obtain the affirmation from the DBE firm and shall attach proof of these efforts, if available. If the ALB intends to replace the DBE Firm, it shall include the replacement firm's information on the form. In the event the ALB is unable to affirm a DBE firm included in its original DBE Utilization Plan at bid submission and it results in a goal shortfall, Good Faith Efforts (GFE's) must be submitted by the fifth day after bid opening. All GFE documentation submitted for consideration should demonstrate the efforts the bidder made prior to the time of bid submission to secure sufficient DBE participation on the

project to meet the DBE goal although the bidder was unable to do so. A DBE firm's failure to timely confirm information contained in the DBE Affirmation Form will be considered as good cause to terminate the DBE firm and will also be considered a part of the ALB's Good Faith Efforts in meeting the goal.

DBE BIDDERS

In the event the Bidder is a certified DBE firm, the Bidder is not required to complete a DBE Utilization Plan as set forth above and would not need to submit a DBE Affirmation Form for the work it is planning to self-perform in order to meet the goal.

JOINT VENTURES

If the bidder is a Joint Venture, the Joint Venture will only be considered a Certified DBE firm if the Joint Venture itself has been certified. The Joint Venture may, however, utilize a Certified DBE firm that is also a partner in the Joint Venture as part of its DBE Utilization Plan. The Certified DBE Firm/Joint Venture Partner, however, does not need to submit a DBE Affirmation Form for any work the Certified DBE Firm/Joint Venture Partner is going to perform to meet the goal. ODOT will consider submission of the Joint Venture's bid as the Certified DBE Firm/Joint Venture Partner's confirmation that it is participating in the contract.

GOOD FAITH EFFORTS (GFE's)

If the DBE contract goal established by ODOT is not met, the ALB shall demonstrate it made adequate good faith efforts to meet the goal, even though it did not succeed in obtaining enough DBE participation to do so.

If the ALB does not meet the goal at bid time, the ALB shall submit its Good Faith Efforts (GFE's) documentation within five (5) days of the bid opening. Submission of DBE affirmation(s) with additional participation sufficient to meet the DBE contract goal does not cure the ALB's failure to meet the goal at bid time or eliminate the ALB's responsibility of submitting GFE's within five (5) days of the bid opening.

The ALB shall demonstrate its GFE's by submitting the following information within five (5) days after the bid opening:

1. All written quotes received from certified DBE firms
2. All written (including email) communications between the ALB and DBE firms
3. All written solicitations to DBE firms, even if unsuccessful
4. Copies of each non-DBE quote when a non-DBE was selected over a DBE for work on the contract
5. Phone logs of communications with DBE firms

The ALB shall utilize the Pre-Bid GFE Template to document their GFE's. This template and supporting documentation shall be sent along with any DBE Affirmation Forms within five (5) days of bid opening. ODOT has provided Good Faith Efforts Guidance located at [Good Faith Efforts \(GFE\) for Contractors | Ohio Department of Transportation](#)

All other bidders shall submit documentation of GFE's if notified the information is required in order for ODOT to complete its bid assessment. Bidders shall have five (5) days from the date of notification to submit all required GFE documentation. Notification will be by email.

ODOT shall utilize the guidance set forth in 49 CFR §26.53 Appendix A in determining whether the bidder has made adequate good faith efforts to meet the goal.

ADMINISTRATIVE RECONSIDERATION

ODOT will review the GFE documentation and issue a written determination on whether adequate GFE's have been demonstrated prior to contract award. If ODOT determines the ALB has failed to demonstrate adequate GFE's to meet the goal, the ALB will have an opportunity for administrative reconsideration prior to the contract being awarded.

As part of this reconsideration, the ALB may provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. Such written documentation or argument must be provided to ODOT, attention to the Office of Chief Legal Counsel, 1980 West Broad Street, MS 1500, Columbus, Ohio 43223 (with copy to the Office of Contract Sales, MS 4110), within two (2) business days of ODOT's written determination that GFE's were not adequately demonstrated. The ALB may also include in their written documentation a request for an in-person meeting to discuss the issue of whether it met the goal or made adequate good faith efforts to do so. ODOT's Office of Chief Legal Counsel will respond to the ALB within five (5) business days of receiving written documentation or holding the in-person meeting.

ODOT will send the ALB a written decision on reconsideration explaining the basis for finding that the ALB did or did not meet the goal or make adequate good faith efforts to do so. The result of the reconsideration process is not administratively appealable to the United States Department of Transportation.

TERMINATION OR REPLACEMENT OF A DBE

By submitting a DBE Utilization Plan, the bidder is committing to use the DBE firms identified in the plan. The ALB/Awarded Contractor shall utilize the specific DBEs listed in the DBE Utilization Plan to perform the work and supply the materials for which each is listed unless the ALB/Awarded Contractor obtains written consent as provided in this paragraph. In order to request termination or substitution of a DBE firm, the ALB/Awarded Contractor shall utilize the Request for Consent to Terminate/Reduce a DBE Commitment form located at [DBE Commitment Reduction or Termination Form | Ohio Department of Transportation](#).

This termination/replacement procedure applies only to DBE firms or the amount of work being utilized to meet the goal.

Without ODOT's written consent to terminate/replace a DBE firm being utilized to meet the goal, the Awarded Contractor shall not be entitled to any payment for DBE listed work or material unless it is performed or supplied by the listed DBE.

GOOD CAUSE

ODOT may provide written consent to terminate a DBE only if it agrees, for reasons stated in a concurrence document, the ALB/Awarded Contractor has good cause to terminate the DBE firm.

For purposes of this section, good cause to terminate a DBE includes the following circumstances:

- 1) The listed DBE firm fails or refuses to provide the required DBE Affirmation Form or to execute a written contract
- 2) The listed DBE firm fails or refuses to perform the work of its subcontract in a manner consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE firm to perform its work on the subcontract results from the bad faith or discriminatory action of the awarded contractor
- 3) The listed DBE firm fails or refuses to meet the awarded contractor's reasonable, nondiscriminatory bond requirements.
- 4) The listed DBE firm becomes bankrupt, insolvent, or exhibits credit unworthiness
- 5) The listed DBE firm is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law
- 6) ODOT has determined the listed DBE firm is not a responsible contractor
- 7) The listed DBE firm voluntarily withdraws from the project and provides to the contractor written notice of its withdrawal
- 8) The listed DBE is ineligible to receive DBE credit for the type of work required
- 9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract; and
- 10) Other documented good cause that ODOT determines compels the termination of the DBE firm. Provided that good cause does not exist if the awarded contractor seeks to terminate a DBE it relied upon to obtain the

contract so the awarded contractor can self-perform the work for which the DBE contractor was engaged or so the awarded contractor can substitute another DBE or non-DBE contractor after contract award.

REPLACEMENT

When a DBE firm is terminated or fails to complete its work on the contract for any reason, the Awarded Contractor must make GFEs to find another DBE firm to replace the original DBE. These GFEs shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal. The GFEs shall be documented by the Awarded Contractor. If ODOT requests documentation under this provision, the Awarded Contractor shall submit the documentation within seven (7) days, which may be extended for an additional seven (7) days if necessary, at the request of the contractor, and ODOT shall provide a written determination to the contractor stating whether GFEs have been demonstrated.

In addition to post-award terminations, the provisions of this section apply to pre-award deletions and substitutions of DBE firms put forward by bidders in the DBE Utilization Plan.

ADDITION

In the event additional DBE participation is required for the project, the Awarded Contractor shall utilize the DBE Affirmation Form located at [DBE Affirmation Form - Projects Sold on or after 9/1/18 | Ohio Department of Transportation](#). The DBE Affirmation Form will be utilized as written confirmation from each DBE firm that it is participating in the contract in the kind and amount of work on the project.

WRITTEN NOTICE TO DBE

Before transmitting to ODOT its request to terminate and/or substitute a DBE firm, the ALB/Awarded Contractor must give notice in writing to the DBE firm with a copy to ODOT of its intent to request to terminate and/or substitute and the reason(s) for the request.

The ALB/Awarded Contractor must give the DBE five (5) days to respond to the notice, advising ODOT and the ALB/Awarded Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why ODOT should not approve the ALB/Awarded Contractor's action. If required in a particular case as a matter of public necessity (e.g., safety), ODOT may provide a response period shorter than five (5) days.

GOAL ATTAINMENT POST AWARD

The Awarded Contractor shall make available upon request a copy of all DBE subcontracts. The Awarded Contractor shall ensure that all subcontracts or agreements with DBEs require that the subcontract and all lower-tier subcontracts be performed in accordance with this Proposal Note.

Approval of a DBE Utilization Plan does not ensure approval of C-92 Requests to Sublet, nor does approval of a DBE Utilization Plan indicate the DBE goal has been met. ODOT will monitor goal attainment throughout the life of the project. It is the responsibility of the Awarded Contractor to advise ODOT of any changes to the DBE Utilization plan throughout the life of the project. The DBE goal of a project is stated as a percentage of the contract. In the event the contract amount increases or decreases, the actual dollar amount of the DBE goal for the project may increase or decrease accordingly.

SANCTIONS AND ADMINISTRATIVE REMEDIES

PRE-BID

Failure by the ALB to do any of the following shall result in the bid being rejected as non-responsive in accordance with ORC §5525.08:

1. Failure to submit a complete DBE Utilization Plan at the time of bid
2. Failure to submit DBE Affirmation Form(s) and/or failure to submit Request for Consent to Terminate/Reduce a DBE Commitment form(s) as required by this Proposal Note; or
3. Failure to meet the goal and/or failure to demonstrate GFEs to meet the goal as required by this Proposal Note.

POST-BID

Failure by the Awarded Contractor to carry out the requirements of this Proposal Note, including the submission of adequate good faith efforts to meet the goal for a project, is a material breach of the contract and may result in the issuance of sanctions as follows:

- 1st Tier: Letter of Reprimand
- 2nd Tier: Damages equivalent to the DBE shortfall
- 3rd Tier: If a pattern of paying damages persists or the contractor has falsified, misrepresented, or withheld information, ODOT can pursue other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to, the following:

- the magnitude and the type of offense
- the degree of the contractor's culpability
- any steps taken to rectify
- the contractor's record of performance on other projects including, but not limited to:
 - annual DBE participation
 - annual DBE participation on projects without goals
 - the number of complaints ODOT has received regarding the contractor
 - the number of times the contractor has been previously sanctioned by ODOT

24. PN 031 - 6/27/2023 – PROMPT PAYMENT - LOCAL-LET CONSTRUCTION PROJECTS

The U.S. Department of Transportation's (USDOT's) rules related to Disadvantaged Business Enterprises are published in 49 CFR Part 26. Within 49 CFR Part 26, 49 CFR 26.29 lays out the prompt payment requirements that apply to ODOT (the Department), its subrecipients (LPA's), and, by extension, both prime contractors and subcontractors (including non-DBEs). The 49 CFR 26.29 requirements apply only to federally funded contracts (i.e., contracts with DOT financial assistance). The prime contractor must comply with this Proposal Note and the Department's prompt payment requirements as published in 107.21 of the C&MS.

Second-tier subcontract means a subcontract awarded directly by the subcontractor for the purpose of acquiring supplies or services (including construction) for performance of a prime contract. It does not include the contractor's supplier agreements with vendors, such as long-term arrangements for materials or supplies that benefit multiple contracts and/or the costs of which are normally applied to a contractor's general and administrative expenses or indirect costs.

The Department will monitor payments made by prime contractors and subcontractors for compliance with this Proposal Note, C&MS 107.21 and, where applicable, 49 CFR 26.29. To facilitate this monitoring, the Department requires both prime **and** subcontractors to report their payments to all subcontractors/second-tier subcontractors with the submission of each invoice. The payment data reported must include any retainage withheld (*when allowable under the Department's Retainage Policy dated 4/14/21*) and any previously withheld retainage released. All such reporting must take place

through a web-based submission on GoFormz. Please note: submission through GoFormz is required for all Local-let projects. Invoices will not be approved and processed for payment unless this reporting form has been submitted and received by the Department.

The prime/subcontractor must report the following information:

- The name of the payee
- The dollar amount of the payment to the payee
- The date the payee was paid
- The amount of retainage withheld (if any)

Ohio's 10-day prompt payment requirement is based on the payer's payment issuance date and NOT the payee's payment receipt date.

The prime/subcontractor must sign each reported payment and submit to ODOT via the GoFormz website.

The second-tier subcontractor is responsible for completing the affirmation of payment form in GoFormz.

The prime is responsible for ensuring that all subcontractors and second-tier subcontractors are correctly completing all prompt payment forms via the GoFormz website.

If the prime or subcontractor(s) fail to submit the aforementioned documentation with each invoice, they will be determined to be non-compliant and invoices will not be processed for payment.

Payees must verify each payment reported by the payer within thirty (30) days of the payment being signed by the payer. This verification must include:

- Whether the payment was received, and if so, whether it was or was not as expected
- The dollar amount of the payment received
- The date the payment was received

The prime contractor shall fully complete the last prompt payment form upon receipt of final payment.

SANCTIONS AND ADMINISTRATIVE REMEDIES

Failure by the prime contractor and/or subcontractor(s) to follow Prompt Payment requirements may result in the issuance of sanctions as follows:

- 1st Tier: Notice of Violation followed by a Letter of Reprimand
- 2nd Tier: If corrective actions are not taken within the specified three (3) business days, a pay estimate in the amount due to the subcontractor(s) that was not reported or paid may be withheld.
- 3rd Tier: If a pattern of paying damages persists or the contractor has falsified, misrepresented, or withheld information, ODOT can pursue other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to the following:

- the magnitude and the type of offense
- the degree of the contractor's culpability
- any steps taken to rectify
- the contractor's record of performance on other projects
- the number of times the contractor has been previously sanctioned by ODOT

25. WAIVER OF C&MS 614.03

ODOT's 2023 C&MS section 614.03, third paragraph, does not apply to any project which is not physically located on the National Highway System (NHS), and/or does not impact NHS traffic in any way.

26. ODOT AS OBLIGEE ON BOND

The contractor shall furnish a performance and payment bond in an amount at least equal to 100 percent of the estimate as security for the faithful performance of its contract. In addition to the project owner, ODOT shall be named as an obligee.

27. NON-DISCRIMINATION PROVISIONS

A. Compliance with Regulations: The contractor will comply with the regulations relative to nondiscrimination in Federally-assisted programs of the USDOT Title 49 CFR, Part 21, as they may be amended from time to time, (hereinafter referred to as the "Regulations"), which are herein incorporated by reference and made a part of this contract.

In addition, the contractor will comply with the provisions of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, FHWA Guidance, and any other Federal, State, and/or local laws, rules and/or regulations (hereinafter referred to as "ADA/504").

B. Nondiscrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin, sex, age, or disability, in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate, either directly or indirectly, in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations, as well as the ADA/504 regulations.

C. Solicitations for Contractors or Subcontractors, including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a contract or subcontract including procurements of materials or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, sex, age, or disability.

D. Information and Reports: The contractor will provide all information and reports required by the Regulations or directives issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the State or FHWA to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of the contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor will so certify to the State or FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.

E. Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the LPA will impose such contract sanctions as it or State/FHWA may determine to be appropriate, including, but not limited to:

- (1) Withholding of payments to the contractor under the contract until the contractor complies, and/or
- (2) Cancellation, termination, or suspension of the contract, in whole or in part.

F. Incorporation of Provisions: The contractor will include the provisions of paragraphs (A) through (E) above in every contract or subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor will take such action with respect to any subcontractor procurement as the LPA or State/FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the LPA/State to enter into such litigation to protect the

interests of the LPA and the State. In addition, the LPA/State may request the United States to enter into such litigation to protect the interests of the United States.

28. PN 015 - 04/17/2020 - CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS

The required contract provisions for federal-aid construction contracts are hereby incorporated by reference as if rewritten herein. The current version of Form FHWA-1273 (available at <https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf>) shall be physically incorporated in all contracts, subcontracts, and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreement for supplies or services related to a construction contract). The prime contractor shall be responsible for ensuring that the FHWA-1273 is physically incorporated into all lower-tier subcontracts.

SANCTIONS AND ADMINISTRATIVE REMEDIES

Failure by the prime contractor to include the provisions of FHWA-1273 in their contract or in their lower-tier subcontracts may result in the issuance of sanctions as follows:

1st Tier: Letter of Reprimand

2nd Tier: Damages equivalent to the daily liquidated damages amount found in section 108.07 for each incident of non-compliance

3rd Tier: If a pattern of paying damages persists or the contractor has falsified, misrepresented, or withheld information, the LPA can pursue other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to the following:

- the magnitude and the type of offense
- the degree of the contractor's culpability
- any steps taken to rectify
- the contractor's record of performance on other projects; and
- the number of times the contractor has been previously sanctioned by the LPA.

29. PN 032 – 01/31/2021 – C92s REQUIRED ON LOCAL-LET CONSTRUCTION PROJECTS

State and Federal law requires that all contractors and subcontractors participating on state or federally funded projects be evidenced in writing and in conformity with all applicable state and federal laws and regulations.

Effective immediately, all projects advertising after 2/1/2021 will require that a Request to Sublet (C92) form is completed for each subcontractor and DBE materials supplier working on the project prior to the start of work.

A template for this form may be found and submit via the GoFormz website located at www.goformz.com.

30. REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS (Electronic Form FHWA 1273 – October 23, 2023) (SEE NEXT PAGE)

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHDL/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) Use of Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature*. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification*. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention*. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents*. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers*. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements*. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures*. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay*. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits*. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio*. The allowable ratio of apprentices to journeymen on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates*. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity*. The use of apprentices and journeymen under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901-3907](#).

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

**ATTACHMENT A - EMPLOYMENT AND MATERIALS
PREFERENCE FOR APPALACHIAN DEVELOPMENT
HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS**

ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

Appendix A

Checklist for Bidders- Federally Funded Projects with a DBE Goal

- Quotes have been obtained by DBE firms for participation on the project
- NAICS codes have been verified on the Ohio Unified DBE Directory that the DBE firms to be utilized can be applied toward the project goal for the specific work wanted:
<http://www.dot.state.oh.us/Divisions/ODI/SDBE/Pages/DBE-Directory.aspx>
- DBE Utilization Plan has been completed & submitted electronically prior to bid opening via: https://odot.formstack.com/forms/dbe_copy (This applies to all Bidders including DBE Firms)
- The Utilization Plan submitted as described above, meets or exceeds the DBE Goal established for the project
- If the DBE Goal has not been met that Good Faith Efforts have been submitted prior to bid to opening to: Dot.contractslettingmgr@dot.ohio.gov
- The affirmation form that is required 5 calendar days after bid opening has been downloaded ready to send out to all DBE firms listed on the Utilization Plan:
<http://Transportation.ohio.gov/Divisions/ODI/SDBE/Pages/Resources.aspx>

BIDDING FORMS

STATEMENT OF QUALIFICATIONS

In order to have its Bid considered, the Bidder shall set forth below the character of previous work done which is similar to that of the Contract Documents, references for such work, and such other detailed information as will enable the Owner to determine responsibility, including experience, skill, and financial standing.

**PROPOSED USE OF SUBCONTRACTORS
FOR SPECIFIC PORTIONS OF THE WORK**

In order to have the Bid considered, a Bidder shall set forth in the same space provided below the name and street address of the Subcontractor proposed to be used in the performance of the specific portions of the work set forth below.

If no Subcontractors are to be used on any item of work, state "None" in the Name column next to such item of work.

<u>Work to be Performed</u>	<u>Name</u>	<u>Street Address</u>
-----------------------------	-------------	-----------------------

Bidders are directed to Section 32 of the General Conditions relating to subcontracting any portion of the work under the Contract.

BID GUARANTY AND CONTRACT BOND

(O.R.C. 153.571-- Not to be filled out if a certified check, cashier's check or letter of credit is submitted.)

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned, as Principal and _____ as Surety, are hereby held and firmly bound unto the City of Worthington, as obligee and ODOT as co-obligee in the penal sum of the dollar amount of the bid submitted by the Principal to the obligee and co-obligee on **April 30, 2024** to undertake the project known as **Selby Blvd West Bridge Replacement PID 116037**. The penal sum referred to herein shall be the dollar amount of the Principal's bid to the obligee, and co-obligee incorporating any additive or deductive alternate bids made by the Principal on the date referred to above to the obligee and co-obligee, which are accepted by the obligee and co-obligee. In no case shall the penal sum exceed the amount of _____ dollars (\$_____). (If the foregoing blank is not filled in, the penal sum will be the full amount of the Principal's bid, including alternates. Alternatively, if the blank is filled in, the amount stated must not be less than the full amount of the bid including alternatives, in dollars and cents. A percentage is not acceptable.) For the payment of the penal sum well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed this _____ day of _____, 2024 .

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above named Principal has submitted a bid for the **Selby Blvd West Bridge Replacement PID 116037** [the Project].

Now, therefore, if the obligee and co-obligee accepts the bid of the Principal and the Principal fails to enter into a proper contract in accordance with the bid, plans, details, specifications, and bills of material; and in the event the Principal pays to the obligee and co-obligee the difference not to exceed ten per cent (10%) of the penalty hereof between the amount specified in the bid and such larger amount for which the obligee and co-obligee may in good faith contract with the next lowest bidder to perform the work covered by the bid; or in the event the obligee and co-obligee does not award the contract to the next lowest bidder and resubmits the project for bidding, the

Principal pays to the obligee and co-obligee the difference not to exceed ten per cent (10%) of the penalty hereof between the amount specified in the bid, or the costs, in connection with the resubmission, of printing new contract documents, required advertising, and printing and mailing notices to prospective bidders, whichever is less, then this obligation shall be null and void, otherwise to remain in full force and effect; if the obligee and co-obligee accepts the bid of the Principal and the Principal within ten (10) days after the awarding of the contract enters into a proper contract in accordance with the bid, plans, details, specifications, and bills of material, which said contract is made a part of this bond the same as though set forth herein.

Now also, if the said Principal shall well and faithfully do and perform the things agreed by said Principal to be done and performed according to the terms of said contract; and shall pay all lawful claims of subcontractors, materials suppliers, and laborers, for labor performed and materials furnished in the carrying forward, performing, or completing of said contract; we agreeing and assenting that this undertaking shall be for the benefit of any materials suppliers or laborer having a just claim, as well as, for the obligee and co-obligee herein; then this obligation shall be void; otherwise the same shall remain in full force and effect; it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall in no event exceed the penal amount of this obligation as herein stated.

The said surety hereby stipulates and agrees that no modifications, omissions, or additions, in or to the terms of the said contract or in or to the plans or specifications therefor shall in any wise affect the obligations of said surety on its bond.

(Signatures contained on the following page.)

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed, and these presents to be signed by their proper officers, the day and year first set forth above.

Principal

By: _____
Title

Surety

By: _____
Title

The foregoing Bid Guaranty is hereby approved:

CITY OF WORTHINGTON

By: _____
City Manager

By: _____
Director of Finance

Approved as to Form:

By: _____
Director of Law

IMPORTANT – Surety companies executing Bonds must appear on the Treasury Department’s most current list (Circular 570 as amended) and must not exceed the underwriting limitation. Surety companies and their agents or attorneys-in-fact must be authorized to transact business in the state where the Project is located and shall furnish proof of such authorization in the Bid.

UNRESOLVED FINDING FOR RECOVERY AFFIDAVIT

Complete one of the two affidavits below.

STATE OF OHIO

) ss

COUNTY OF FRANKLIN

The undersigned, being first duly sworn, is the _____ (title and office) of _____ (company), and states that, upon inspection of all pertinent records, that the Auditor of the State of Ohio has not issued a finding for recovery against said company and which recovery is unresolved, pursuant to Section 9.24 of the Ohio Revised Code.

Affiant

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

Notary Public

STATE OF OHIO

) ss

COUNTY OF FRANKLIN

The undersigned, being first duly sworn, is the _____ (title and office) of _____ (company), and states that the Auditor of the State of Ohio has issued a finding of recovery against the company, but, that under Section 9.24, said recovery is not unresolved pursuant to one or more of the following factors (initial those that apply):

_____ The money identified in the finding for recovery is paid in full to the state agency or political subdivision to whom the money was owed;

_____ The debtor has entered into a repayment plan that is approved by the attorney general and the state agency or political subdivision to whom the money identified in the finding for recovery is owed.

_____ The attorney general has waived a repayment plan for good cause shown.

_____ The debtor and state agency or political subdivision to whom the money identified in the finding for recovery is owed have agreed to a payment plan established through an enforceable settlement agreement.

_____ The state agency or political subdivision desiring to enter into the contract with a debtor certifies, and the attorney general concurs, that all of the following are true:

- Essential services the state agency or political subdivision is seeking to obtain from the debtor cannot be provided by any other person besides the debtor;
- Awarding a contract to the debtor for the essential services described in (1) above is in the best interest of the state;
- Good faith efforts have been made to collect the money identified in the finding of recovery.

_____ The debtor has commenced an action to contest the finding for recovery and a final determination on the action has not yet been reached.

Affiant

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

Notary Public

NON-COLLUSION AFFIDAVIT

State of _____

County of _____

Project Name: _____

Project No.: _____

Contractor: _____

The undersigned, being first duly sworn, deposes and says that he/she is the (owner, a partner, president, secretary, etc.) of _____, the party making the foregoing Bid: that such Bid is not in the interest of or on behalf of any undisclosed person, partnership, company, association, or corporation; that such Bid is genuine and not collusive or sham; that said Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham Bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham Bid, or that anyone shall refrain from bidding; that said Bidder has not in any manner, directly or indirectly, sought by agreement, communication or conference with anyone to fix the Bid price of or cost element of such Bid price, or of that of any other Bidder, or anyone interested in the proposed contract; that all statements contained in such bid are true; and, further, that said Bidder has not, directly or indirectly, submitted its Bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid and will not pay any fee in association, organization, Bid depository, or to any member or agent thereof, or to any other individual except to such person or persons as have a partnership or the financial interest with said Bidder in its general business.

Contractor:

By _____

Its _____

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

Notary Public

BID PROPOSAL

Project: FRA-Selby Blvd West Bridge Replacement

PID 116037

Description of Project: **Replace existing box culvert located on W Selby Blvd. and all related work.**

To: Ms. Robyn Stewart
City Manager
City of Worthington, Ohio

After a careful examination of the specifications, form of Contract, and the site of the proposed work, the undersigned hereby proposes and agrees, if this proposal be accepted, to enter into a Contract, using the form of contract provided for, to furnish all equipment, labor, materials, and construction to complete the said work in accordance with the terms and conditions specified, and to furnish a satisfactory bond, in the amount of the total amount of the Contract, conditioned as in the form prescribed by law as a guarantee for the faithful performance of the Contract, for the following prices (All prices bid are to be unit prices, not lump sum unless so noted):

Total in words: _____
_____.

Total in numbers: \$ _____

*If there is any difference in the totals, the total bid in words shall control.

Documents to Accompany Bids

The Bidder shall be aware that the following fully executed documents are required in order for its bid to be considered:

1. Noncollusion Affidavit
2. Bid proposal
3. Bid Guaranty
4. Unresolved Finding for Recovery Affidavit
5. Personal Property Tax Affidavit
6. Statement of Qualifications
7. Proposed Use of Sub-Contractors for Specific Portions of the Work
8. A signed certificate from a surety company acceptable to the Owner that such surety shall provide the Bidder if the Bidder is awarded the Contract, with a Contract Bond.

Signature of Bidder

Date _____ Firm Name _____

Official Address _____

By: _____

Title: _____

Other Interested Persons

NAME _____ ADDRESS _____

NAME _____ ADDRESS _____

NAME _____ ADDRESS _____

The Bidder acknowledges the receipt of the following Addenda:

Item	Item Ext		Quantity	Units	Materials	Labor	Extension
		ROADWAY					
201	11000	CLEARING AND GRUBBING (All Trees have been removed, stumps/roots still remain)	1	LS			
202	23000	PAVEMENT REMOVED	585	SY			
202	30000	WALK REMOVED	1054	SF			
202	32500	CURB AND GUTTER REMOVED	528	FT			
203	10000	EXCAVATION	310	CY			
203	20000	EMBANKMENT	120	CY			
204	10000	SUBGRADE COMPACTION	574	SY			
204	45000	PROOF ROLLING	2	HOUR			
608	10000	4" CONCRETE WALK	1525	SF			
609	12000	COMBINATION CURB AND GUTTER, TYPE 2	595	FT			
		EROSION CONTROL					
601	32204	ROCK CHANNEL PROTECTION, TYPE C WITH GEOTEXTILE FABRIC	170	CY			
659	00100	SOIL ANALYSIS TEST	2	EACH			
659	00300	TOPSOIL	72	CY			
659	00510	SEEDING AND MULCHING, CLASS 2	843	SY			
659	20000	COMMERCIAL FERTILIZER	0.09	TON			
659	31000	LIME	0.13	ACRE			
659	35000	WATER	4	MGAL			
832	30000	EROSION CONTROL	5000	EACH			
		DRAINAGE					
601	21050	TIED CONCRETE BLOCK MAT WITH TYPE 1 UNDERLAYMENT	3.6	SY			
605	06000	4" BASE PIPE UNDERDRAINS	516	FT			
611	00406	4" CONDUIT, TYPE F	47	FT			
611	98630	CATCH BASIN ADJUSTED TO GRADE	2	EACH			
611	99654	MANHOLE ADJUSTED TO GRADE	2	EACH			
613	41200	LOW STRENGTH MORTAR BACKFILL	237	CY			
		PAVEMENT					
254	01000	PAVEMENT PLANING, ASPHALT CONCRETE	100	SY			
301	56000	ASPHALT CONCRETE BASE, PG64-22, (449)4"	74	CY			
304	20000	AGGREGATE BASE6"	96	CY			
407	20000	NON-TRACKING TACK COAT	89	GAL			
441	70000	ASPHALT CONCRETE SURFACE COURSE, TYPE 1, (449), PG64-22	60	CY			
		MAINTENANCE OF TRAFFIC					
SPECIAL	61411300	WORK ZONE TRAFFIC SIGNAL	1	EACH			
614	21000	WORK ZONE CENTER LINE, CLASS I	0.07	MILE			
614	22000	WORK ZONE EDGE LINE, CLASS I, 4"	0.19	MILE			
614	26000	WORK ZONE STOP LINE, CLASS I	24	FT			
615	10000	ROADS FOR MAINTAINING TRAFFIC	LS				
615	25000	PAVEMENT FOR MAINTAINING TRAFFIC, CLASS B	603	SY			
616	10000	WATER	3	MGAL			
622	41110	PORTABLE BARRIER, ANCHORED	400	FT			
		WATER WORK					
638	01200	8" WATER MAIN DUCTILE IRON PIPE ANSI CLASS 52, PUSH-ON JOINTS AND FITTINGS	243	FT			
638	06702	18" STEEL PIPE ENCASEMENT, OPEN CUT	48	FT			
638	07480	6" GATE VALVE	1	EACH			
638	07900	8" GATE VALVE AND VALVE BOX	3	EACH			
638	10600	FIRE HYDRANT AND GATE VALVE REMOVED AND RESET	1	EACH			
		STRUCTURE OVER 20 FOOT SPAN (2561101)					
202	11002	STRUCTURE REMOVED, OVER 20 FOOT SPAN	1	LS			
503	11100	COFFERDAMS AND EXCAVATION BRACING	1	LS			
503	21300	UNCLASSIFIED EXCAVATION	1	LS			
509	10000	EPOXY COATED STEEL REINFORCEMENT	39873	LB			
511	46012	CLASS QC1 CONCRETE WITH QC/QA, RETAINING/WINGWALL NOT INCLUDING FOOTING	33	CY			
511	46512	CLASS QC1 CONCRETE WITH QC/QA, FOOTING	335	CY			
511	46612	CLASS QC1 CONCRETE WITH QC/QA, HEADWALL	12	CY			
512	10100	SEALING OF CONCRETE SURFACES (EPOXY-URETHANE)	134	SY			
512	33000	TYPE 2 WATERPROOFING	142	SY			
512	33010	TYPE 3 WATERPROOFING	295	SY			
516	13600	1" PREFORMED EXPANSION JOINT FILLER	71	SF			
518	21200	POROUS BACKFILL WITH GEOTEXTILE FABRIC	45	CY			
518	39800	4" PERFORATED CORRUGATED PLASTIC PIPE	64	FT			
518	39900	4" NON-PERFORATED CORRUGATED PLASTIC PIPE, INCLUDING SPECIALS	9	FT			
611	70001	CONDUIT, TYPE A, PRECAST REINFORCED CONCRETE THREE SIDED FLAT TOPPED CULVERT, AS PER PLAN (26' SPAN x 7'-2" RISE)	72	FT			
SPECIAL	69012050	REINFORCED MESH FOR TRANSVERSE AND/OR LONGITUDINAL JOINTS AND CRACKS	38	SY			
		INCIDENTALS					
614	11001	MAINTAINING TRAFFIC, AS PER PLAN	1	LS			
SPECIAL	62399000	CONSTRUCTION LAYOUT STAKES AND SURVEYING	1	LS			
624	10000	MOBILIZATION	1	LS			

CONTRACT FORMS

CONTRACT

This Contract made as of this ___ day of _____, 2024, by and between the City of Worthington, an Ohio municipal corporation, with offices at 6550 N. High Street, Worthington, Ohio 43085 (hereinafter referred to as the "Owner"), and _____, a(n) _____(state of formation) corporation, with offices at _____ (hereinafter referred to as the "Contractor").

WITNESSETH: That for and in consideration of the mutual covenants hereinafter stipulated to be kept and performed, the Owner and the Contractor agree as set forth below:

Article I. Scope

§1. Scope. The Contractor hereby agrees to furnish all of the materials, supplies, tools, equipment, labor and other services necessary for the construction and completion of:

Project Description: Selby Blvd West Bridge Replacement

PID **116037**

in accordance with the requirements and provisions of the following Documents as well as the Contract Documents as hereinafter defined and which are hereby made a part of this Contract:

(a) Plans prepared for same by **American Structurepoint Inc.** dated and revised

_____, 2024.

(b) Specifications and supplemental specifications prepared or issued by Design

Engineering Firm and dated and revised _____, 2024

(c) Addenda.

No. _____ dated _____, 20__.

No. _____ dated _____, 20__.

No. _____ dated _____, 20__.

(d) Bidding requirements including Advertisement for Bids and Information for Bidders.

(e) Bidding forms including Bid Guaranty, Non-Collusion Affidavit, Statement of Qualifications, Bid Proposal, Unresolved Finding for Recovery Affidavit, Personal Property Tax Affidavit, and Proposed Use of Sub-Contractors for Specific Portions of the Work.

(f) Contract Forms and General Conditions including Contract, Contract Bond, Certificates of Insurance, Notice of Award, Notice to Proceed, Change Order, Affidavit of Payment, Payroll Information, General Conditions, Supplemental General Conditions, Specifications, and Supplemental Specifications, Drawings, and Prevailing Rates of Wages.

§2. Time.

(a) The work to be performed under this Contract shall be commenced within ten (10) calendar days after receipt of the Notice to Proceed. The work shall be completed within 120 calendar days after receipt of the Notice to Proceed (“Contract Time”) unless the period for completion is extended otherwise by the Contract Documents.

(b) Failure to complete the work within the number of calendar days stated in this §2, including extensions granted thereto as determined by the General Conditions made applicable to the Contract, shall entitle the Owner to deduct from the monies due to the Contractor as liquidated damages an amount equal to _____ \$XXX.XX for each calendar day of delay in the completion of the work.

§3. Payment.

(a) Subject to additions and deductions by Change Order and quantities actually performed, the Owner shall pay the Contractor for work in the manner and at such times as set forth in the General Conditions, the sum of \$_____ (the “Contract Price”).

(b) The Owner shall make progress payments on account of the Contract for labor performed and for material delivered to the site of work and shall retain a percentage as provided in the General Conditions applicable to the Contract.

This Contract shall be binding upon all parties hereto and their respective heirs, executors, administrators, successors and assigns.

IN WITNESS WHEREOF, the parties have executed or caused to be executed by their duly authorized officials this Contract, as of the year first written above.

CITY OF WORTHINGTON

COMPANY

By: _____

By _____

Its: City Manager

Its _____

Approved as to form:

Director of Law
City of Worthington

DEPARTMENT OF FINANCE CERTIFICATE

It is hereby certified that the amount of \$_____required to meet the Contract, Agreement, Obligation, payment or Expenditure, for the above has been lawfully appropriated, authorized or directed for such purpose, is in the Treasury or in the process of collection to the credit of the Capital Improvements Projects Fund and is free from any obligation or certification now outstanding.

CITY OF WORTHINGTON

Director of Finance

Date: _____

NOTICE OF AWARD

To: _____

PROJECT DESCRIPTION: SELBY BLVD WEST BRIDGE REPLACEMENT

PID 116037

The Owner has considered the Bid submitted by you on **May 1, 2024**, (Bid Date) for the above described work in response to its Advertisement for Bids and Information for Bidders. you are hereby notified that your Bid has been accepted for items in the amount of

\$

Fill in amount in words

You are required by the Information for Bidders to execute the Contract and to furnish the required Contract Bond and Certificates of Insurance within ten calendar days from the date of this notice to you.

If you fail to execute said Contract and to furnish said Contract Bond within ten days from the date of this notice, said Owner will be entitled to consider all your rights arising out of the Owner's acceptance of your Bid as abandoned and as a forfeiture of your Bid guaranty subject to the liability as set forth in Section 153.64 of the Ohio Revised Code. The Owner will be entitled to such other rights as may be granted by law.

The Owner reserves the right to rescind the award of the work at any time before the execution of the Contract by all parties without incurring any liability. Therefore, if you change your position, economically or otherwise, after receiving a verbal or written notice of award and in reliance upon the Owner executing the Contract, you agree to do so solely at your own risk and the Owner will not incur any liability from your change of position.

You are required to return an acknowledged copy of this Notice of Award to the Owner.

Dated this ___ day of _____, 2024_.

CITY OF WORTHINGTON

BY: _____
City Manager

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged by

this ___ day of _____, 2024.

Name and Title

cc: Contractor's Surety
Surety's Agent

(Note: R.C. 9.32 requires that the Surety and its Agent be given written notice by mail of the award of the contract.)

NOTICE TO PROCEED

To:

Project Description: Selby Blvd West Bridge Replacement **PID 116037**

You are hereby notified to commence work in accordance with the Contract dated _____, 2024, and you are to complete the work within ___consecutive calendar days thereafter. The date of completion of all work is therefore _____, 2024.

You are required to return an acknowledged copy of this Notice to Proceed to the Owner.

Dated: _____, 2024_.

CITY OF WORTHINGTON

BY: _____
City Manager

Acceptance of Notice

Receipt of the above Notice
to Proceed is hereby acknowledged
by _____ (name of Contractor)
this ____ day of ____, 2024_.

By: _____

Print Name: _____

Title: _____

CERTIFICATE OF SUBSTANTIAL COMPLETION

Owner:	Owner's Contract No.:
Contractor:	Contractor's Project No.:
Engineer:	Engineer's Project No.:
Project:	Contract Name:

This [preliminary] [final] Certificate of Substantial Completion applies to:

- All Work The following specified portions of the Work:

Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Work or portion thereof designated above is hereby established, subject to the provisions of the Contract pertaining to Substantial Completion. The date of Substantial Completion in the final Certificate of Substantial Completion marks the commencement of the contractual correction period and applicable warranties required by the Contract.

A punch list of items to be completed or corrected is attached to this Certificate. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance, and warranties upon Owner's use or occupancy of the Work shall be as provided in the Contract, except as amended as follows: *[Note: Amendments of contractual responsibilities recorded in this Certificate should be the product of mutual agreement of Owner and Contractor; see Paragraph 15.03.D of the General Conditions.]*

Amendments to Owner's responsibilities: None As follows

Amendments to Contractor's responsibilities: None As follows:

The following documents are attached to and made a part of this Certificate: *[punch list; others]*

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents, nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract.

EXECUTED BY ENGINEER:	RECEIVED:	RECEIVED:
By: _____ (Authorized signature)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Title: _____	Title: _____	Title: _____
Date: _____	Date: _____	Date: _____

EJCDC® C-625, Certificate of Substantial Completion.
Prepared and published 2013 by the Engineers Joint Contract Documents Committee.

2.0



Contractor's Application for Payment No.

	Application	Application Date:
To	From (Contractor)	Via (Engineer)
Project:	Contract:	
Owner's Contract No. :	00F16c10e[P-c]ect1W0. :	Engineer's Project No.:

Application For Payment
Change Order Summary

Approved Change Orders		
Number	Additions	Deductions
TOTALS		
NET CHANGE BY		
CHANGE ORDERS		

1. ORIGINAL CONTRACT PRICE.....	\$ _____
2. Net change by Change Orders.....	\$ _____
3. Current Contract Price(Line 1 - 2).....	\$ _____
4. TOTAL COMPLETED AND STORED TO DATE	
(Column F total on Progress Estimates).....	\$ _____
5. RETAINAGE:	
a. X _____ Work Completed.....	\$ _____
b. X _____ Stored Material.....	\$ _____
c. Total Retainage(Line 5.a + Line 5.b).....	\$ _____
6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5.c)	\$ _____
7. LESS PREVIOUS PAYMENTS (Line 6 from prior Applications).....	\$ _____
8. AMOUNT DUE THIS APPLICATION	\$ _____
9. BALANCE TO FINISH, PLUS RETAINAGE	
(Column G total on Progress Estimates + Line 5.c above).....	\$ _____

Contractor's Certification

The undersigned Contractor certifies, to the best of its knowledge, the following:

(1) All previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with the Work covered by prior Applications for Payment;

(2) Title to all Work, materials and equipment incorporated in said Work, or otherwise listed in or covered by this Application for Payment, will pass to Owner at time of payment free and clear of all Liens, security interests, and encumbrances (except such as are covered by a bond acceptable to Owner indemnifying Owner against any such Liens, security interest, or encumbrances); and

(3) All the Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

By: _____ Date: _____

Payment of:	\$ _____
	(Line 8 or other - attach explanation of the other amount)
recommended by:	_____
	(Engineer) (Date)
Payment of:	\$ _____
	(Line 8 or other - attach explanation of the other amount)
approved by:	_____
approved by:	_____
	Funding or Financing Entity (if applicable) (Date)

PREVAILING RATES OF WAGES

See Attachment A

GENERAL CONDITIONS

1.0 Conformity with Plans and Specifications

- 1.1 All work performed and all materials furnished shall be in reasonably close conformity with the lines, grades, cross sections, dimensions and material requirements, including tolerances, shown on the plans or indicated in the specifications.
- 1.2 In the event the Engineer finds the materials, or the finished product in which the materials are used, not within reasonably close conformity with the plans and specifications but that reasonably acceptable work has been produced, the Engineer will determine if the work shall be accepted and remain in place. In this event, the Engineer will document the basis of acceptance by contract modification which may provide for an appropriate adjustment in the contract price for such work or materials as deemed necessary to conform to the determination based on engineering judgment.
- 1.3 In the event the Engineer finds the materials of the finished product in which the materials are used or the work is performed are not in reasonably close conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.
- 1.4 Upon the order of the Engineer, failure of the contractor to follow the order of the Engineer, pursuant to this section, shall give the Owner the unqualified right to supply the materials for the finished product and perform the labor or cause it to be performed and any and all expense chargeable thereto, directly or indirectly, shall be deducted or billed to the Contractor.

2.0 Schedules, Reports and Records

- 2.1 The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records, and other data where applicable as required by the Contract Documents for the work to be performed.
- 2.2 Within 15 days after the execution of the Contract the Contractor shall submit construction progress schedules showing the order in which it proposes to carry on the work, including dates at which various parts of the work will be started, estimated date of completion for each part, and as applicable:
 - (a) The dates at which special detail drawings will be required.
 - (b) Respective dates for submission of Shop Drawings, the beginning of manufacture, the testing and the installation of materials, supplies, and equipment.

- 2.3 If the Contractor's operations are materially affected by changes in the plan or in the amount of the work or if it has failed to comply with the approved schedule, the Contractor shall submit a revised progress schedule, if requested by the Engineer, which schedule shall show how the Contractor proposes to prosecute the balance of the work. The Contractor shall submit the revised progress schedule within 10 days after the date of the request.
- 2.4 The Contractor shall incorporate into every progress schedule submitted any Contract requirements regarding the order of performance of portions of the work. The Contractor shall use all practicable means to make the progress of the work conform to that shown on the progress schedule which is in effect. Should the prosecution of the work, for any reason, be discontinued, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operations.
- 2.5 The Contractor shall submit 3 copies of a current program schedule with each request for payment. Failure to submit an updated, realistic and accurate progress schedule will be sufficient cause for the Engineer to decline to approve the request for payment. In the event the Engineer determines that the Contractor is behind schedule and may be subject to liquidated damages for delay, the Engineer will deduct from the Contractor's request for payment such sum as the Engineer estimates may be reasonable for such liquidated damages. If the progress is improved and the Engineer estimates that the Contractor is back on schedule, the liquidated damages will be released in the current request for payment.
- 2.6 The Contractor shall also submit a schedule of payments that the Contractor anticipates to be earned during the course of work.
- 2.7 Whenever the work accomplished to date deviates from the latest construction progress schedules, the Contractor shall submit revised construction progress schedules indicating the work accomplished to date and the work to be done. When the work to be done is behind schedule, the Contractor shall include the necessary remedial measures to put the work on schedule.

3.0 Engineer's Authority

- 3.1 The Engineer shall act as the Owner's representative during the construction period and will decide questions which may arise as to quality and acceptability of materials furnished and work performed. The Engineer shall interpret the intent of the Contract Documents in a fair and unbiased manner. The Engineer will make periodic visits to the site and determine if the work is proceeding in accordance with the Contract Documents.
- 3.2 The Engineer will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.

- 3.3 The Engineer has immediate charge of the engineering details of each construction project and is responsible for the administration and satisfactory completion of the project. The Engineer has the authority to reject defective material and to suspend any work that is being improperly performed.
- 3.4 The Engineer will have the authority to suspend the work wholly or in part due to the failure of the Contractor to correct conditions unsafe for the workers or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for such periods as is deemed necessary due to unsuitable weather. The suspension of the work for the above reasons does not relieve the Contractor of its responsibility according to Section 11 of these General Conditions.
- 3.5 In the event the Engineer orders the work suspended for unsafe conditions, whether they be unsafe to workers or the public, or unsuitable weather, use of defective material not in conformity with the specifications or because work is being improperly performed, the expense, whether direct or indirect for such suspension shall be borne solely by the Contractor.

4.0 Owner's Inspector

- 4.1 Inspectors employed by the Owner will be authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. The Inspector is not authorized to alter or waive the provisions of the Contract. The Inspector shall have the authority to reject materials which do not meet specification requirements or suspend the portion of the work involved until any question at issue can be referred to and decided by the Engineer. The Inspector is not authorized to issue instructions contrary to the plans and specifications, or to act for the Contractor.

5.0 Inspection and Testing

- 5.1 All materials and equipment used in the construction of the Project shall be subject to inspection and testing in accordance with accepted standards, as required and defined in the Contract Documents.
- 5.2 The Owner shall provide all inspection and testing services not required by the Contract Documents.
- 5.3 The Contractor shall provide all the testing and inspection services required by the Contract Documents.
- 5.4 If the Contract Documents, laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction require any work to specifically be inspected, tested, or approved by someone other than the Contractor, the Contractor will give the Engineer timely notice of readiness. The Contractor will then furnish the Engineer the required certificates of inspection, testing, or approval.

- 5.5 Inspections, tests or approvals by the Engineer or others shall not relieve the Contractor from its obligations to perform the work in accordance with the requirements of the Contract Documents.
- 5.6 The Engineer and its representatives will at all times have access to the work. In addition, authorized representatives and agents of the Owner and any participating federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the work and also for any inspection or testing thereof.
- 5.7 If any work is covered, contrary to the written instructions of the Engineer, it must be uncovered for the Engineer's observation and replaced at the Contractor's expense.
- 5.8 If the Engineer considers it necessary or advisable that covered work be inspected or tested by others, the Contractor at the Engineer's request, will uncover, expose or otherwise make available for observation, inspection or testing as the Engineer may require, that portion of the work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such work is defective, the Contractor will bear all the expenses of such uncovering, exposure, observation, inspection and testing, and of satisfactory reconstruction. If, however, such work is not found to be defective, the Contractor may be allowed an increase in the Contract Price or an extension of the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction and an appropriate Change Order may be issued.

6.0 Correction of Work

- 6.1 Unacceptable work, whether the result of poor workmanship, nonconformity with Contract Documents, use of defective materials, damage through carelessness or any other cause, found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner by the Contractor. The Contractor shall bear the expense of all work of other Contractors destroyed or damaged by such removal or replacement.
- 6.2 Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the Contract. Work so done may be ordered removed or replaced at the Contractor's expense.
- 6.3 If the Contractor does not comply with any reasonable order of the Engineer under the provisions of this section within 10 days after receipt of written notice, the

Owner will have authority to cause unacceptable work to be remedied at the expense of the Contractor.

- 6.4 The correction of all items shall be completed in all respects within 30 days after the date of Substantial Completion unless specifically noted otherwise. If punch list items are not completed or corrected by this date, the Owner has the right to perform the work by other means and the cost of the same will be charged against the Contractor originally responsible for the work.
- 6.6 If more than one inspection by the Engineer is required for the purpose of evaluating punch list items to be completed or corrected, such inspection will be performed at the Contractor's expense.

7.0 Surveys, Permits, Regulations, Land and Right-of-Way

- 7.1 The Owner shall establish control points for locating the principal component parts of the work together with a suitable number of bench marks adjacent to the work as shown in the Contract Documents. From the information provided by the Owner, unless otherwise specified in the Contract Documents, the Contractor shall develop and make all detail surveys needed for construction such as slope stakes, better boards, stakes for pile locations and other working points, lines, elevations, and cut sheets.
- 7.2 Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor unless otherwise specified. Permits, licenses, and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Owner, unless otherwise specified. The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the Contract Documents are at variance therewith, it shall promptly notify the Engineer in writing and any necessary changes shall be adjusted as provided in these Contract Documents.
- 7.3 Prior to the closure of or working in or on any portion of a street the Contractor shall obtain a permit from the Owner.
- 7.4 Prior to issuance of the Notice to Proceed, the Owner shall obtain all land and rights-of-way necessary for carrying out and for the completion of the work to be performed pursuant to the Contract Documents, unless otherwise mutually agreed.

8.0 Maintenance of the Work Site

- 8.1 The Contractor shall obtain the permission of the Owner before placing or maintaining any temporary facilities on the Owner's property or that of an adjacent landowner.

- 8.2 The Contractor shall provide, at its expense, a suitable spill area away from the Owner's property for the disposal of waste materials and rubbish.
- 8.3 The Contractor shall, at all times, keep the construction area free from accumulations of waste material and rubbish, and shall, prior to the completion of the work, and at other times as required by the Owner or Engineer, remove from and about the work area and the adjacent premises, all such waste material and rubbish.
- 8.4 At the completion of the work, the Contractor shall remove from the interior of the building, all minor rubbish that has accumulated, and shall leave the interior broom clean and the grounds around the structure rake clean.

9.0 Laws to be Observed

- 9.1 The Contractor shall keep fully informed of all federal, Ohio, and City of Worthington laws, ordinances, and regulations and all orders and decrees of authorities having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Contractor or its agents or employees.

10.0 Federal Aid Provisions

- 10.1 When the United States government pays all or any portion of the cost of a project, the federal laws and the rules and regulations made pursuant to such laws must be observed by the Contractor and the work shall be subject to the inspection of the appropriate federal agency.
- 10.2 Such inspection shall in no way make the federal government a party to this Contract and will in no way interfere with the rights of either party hereunder.

11.0 Responsibility for Damage Claims

- 11.1 The Contractor and Surety shall save harmless the Owner and all of its representatives from all suits, actions, or claims of any character brought on account of any injuries or damages sustained by any person or property in consequence of any neglect in safeguarding the work or through the use of unacceptable materials in the construction of the improvement or on account of any act or omission by the Contractor, or its agents, and it shall pay any judgment obtained or growing out of any claims or suits.

12.0 Contractor's Responsibility for Work

- 12.1 Until final written acceptance of the project by the Owner, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof by the action of the elements, from vandalism or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, of the public enemy or governmental authorities.
- 12.2 The Contractor shall not suspend the work unless approved by the Engineer and in such cases under the provisions of Section 20 of these General Conditions, the Contractor shall be responsible for the project and shall take such precautions as may be necessary to prevent damage to the project, provide for adequate drainage and shall erect any necessary temporary structures, signs, or other facilities at its expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, meetings, and soddings furnished under the Contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

13.0 Supervision by Contractor

- 13.1 The Contractor will supervise and direct the work and will be solely responsible for the means, methods, techniques, safety, sequences, and procedures of construction. The Contractor will employ and maintain on the work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present and on the site at all times as required to perform adequate supervision and coordination of the work.

14.0 Personal Liability of Public Officials

- 14.1 In carrying out any of the provisions of these specifications, or in exercising any power or authority granted to them by or within the scope of the Contract, there shall be no liability upon the Owner or its authorized representatives, either personally or as officials of the Owner, it being understood that in all such matters they act solely as agents and representatives of the Owner.

15.0 Non-Waiver of Legal Rights

15.1 Neither the inspection by the Engineer, nor by any of its duly authorized representatives, nor any order, measurements, or certificates by the Owner, or said representatives, nor any order by the Owner for the payments of money, nor any payment for, nor acceptance of any work by the Owner, nor any extension of time, nor any possession taken by the Owner or its duly authorized representatives, shall operate as a waiver of any provision of this Contract, or of any power herein reserved to the Owner, or any right to damages herein provided; nor shall any waiver of any breach of this Contract be held to be a waiver of any other subsequent breach.

16.0 O.S.H.A. Compliance

16.1 All Contractors shall comply with the provisions of the Occupation, Safety and Health Act of 1970 and subsequent amendments and regulations thereto.

17.0 Changes in the Work

17.1 The Owner may at any time, as the need arises, order changes within the scope of the work without invalidating the Contract. If such changes increase or decrease the amount due under the Contract Documents, or in the time required for performance of the work, an equitable adjustment may be authorized by Change Order.

17.2 The Engineer also may, at any time, by issuing a Field Order, make changes in the details of the work. The Contractor shall proceed with the performance of any changes in the work so ordered by the Engineer unless the Contractor believes that such Field Order entitles it to a change in Contract Price or Time, or both, in which event the Contractor shall give the Engineer written notice thereof within 7 days after the receipt of the ordered change. Thereafter, the Contractor shall document the basis for the change in Contract Price or Time within 30 days. The Contractor shall not execute such changes until the Contractor receives an executed Change Order approved by the Owner.

18.0 Changes in Contract Price

18.1 The Contract Price may be changed only by a Change Order. The value of any work covered by a Change Order or of any claim for increase or decrease in the Contract Price shall be determined by one or more of the following methods in the order of precedence listed below:

- (a) Item prices previously approved
- b) An agreed lump sum.

- (c) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition, there shall be added an amount to be agreed upon, but not to exceed 15 percent of the actual cost of the work to cover the cost of general overhead and profit.

18.2 All Contract Price changes shall be approved by the Owner.

19.0 Time for Completion and Liquidated Damages

19.1 The date of beginning and the time for completion of the work are essential conditions of the Contract Documents and Notice to Proceed.

19.2 The Contractor will proceed with the work at much rate of progress to ensure full completion within the Contract Time. It is expressly understood and agreed, by and between the Contractor and the Owner, that the Contract Time for the completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.

19.3 If the Contractor shall fail to complete the work within the Contract Time, or extension of time granted by the Owner, then the Contractor will pay to the Owner the amount of liquidated damages as specified in the Contract for each calendar day that the Contractor shall be in default after the time stipulated in the Contract Documents.

19.4 The Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due to the following and the Contractor has promptly given written notice of such delay to the Owner or Engineer:

- (a) To any preference, priority or allocation order duly issued by the Owner.
- (b) To unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, or the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather.

19.5

SCHEDULE OF LIQUIDATED DAMAGES

Deducted Day	Original Contract Amount (Total Amount of the Bid):	Amount of Liquidated Damages to be
		for Each Calendar
		of Overrun in Time:
	<u>For More Than</u>	<u>To and Including</u>
	\$0	\$25,000.
	\$25,000.	\$ 30.00
	\$50,000.	\$ 50.00
	\$100,000.	\$ 75.00
	\$500,000.	\$100.00
	\$1,000,000.	\$150.00
	\$2,000,000.	\$200.00
	\$5,000,000.	\$400.00
	\$10,000,000.	\$500.00
	OVER \$10,000,000.	\$600.00

19.6 In addition to liquidated damages, the Contractor shall be liable for all expenses incurred by the Owner by reason of the Contractor's default, including judgments awarded to others, reasonable attorneys' fees and all expenses of engineering and inspection after the date set for completion.

19.7 The Owner shall have the right to deduct all or any unpaid balance from liquidated damages or other expenses from any money due or to become due to the Contractor. The amount still owing, if any after such deduction, shall be paid on demand by the Contractor or its Surety. Such payment shall not relieve the Contractor or its Surety from any other obligations under this Contract. It is also expressly agreed that the Contractor shall be liable to the Owner for all damages from the Contractor's failure to complete the work within the time limit fixed.

20.0 Suspension of Work, Termination and Delay

20.1 The Owner may suspend the work or any portion thereof for a period of not more than 90 days or such further time as agreed upon by the Contractor, by written notice to the Contractor and the Engineer fixing the date on which the work shall be resumed. The Contractor will resume the work on the date so fixed. The Contractor may be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension.

- 20.2 If the Contractor should be adjudged a bankrupt, or should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or if it should persistently or repeatedly refuse or should fail, except in cases for which extensions of time are provided and then only for such time, to supply enough properly skilled workers or materials, or if the Contractor should fail to make payments to subcontractors or for material or labor, so as to affect the progress of the work, or persistently be in violation of a substantial requirement of the Contract, or be in violation of Ohio law, the Owner, may, without prejudice to any other right or remedy and after giving the Contractor and its Surety 10 days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools, equipment and other facilities installed on the work and paid for by the Owner and finish the work by whatever method it may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract Price shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expense incurred by the Owner as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Engineer.
- 20.3 Where the Contract has been terminated by the Owner, such termination shall not affect or terminate any of the rights of the Owner as against the Contractor or its Surety then existing or which may thereafter accrue because of such default. Any retention or payment of moneys by the Owner due the Contractor under the terms of the Contract, shall not release the Contractor or its Surety from liability for the default.
- 20.4 After 10 days from delivery of a written notice to the Contractor and the Engineer, the Owner may, without cause and without prejudice to any other right or remedy, elect to terminate the Contract. In such case, the Contractor shall be paid for all work executed and any expense sustained plus reasonable profit, unless such termination was due to the act or conduct of the Contractor.
- 20.5 If, through no act or fault of the Contractor, the work is suspended for a period of more than 90 days by the Owner or under an order of a Court or other public authority, or the Engineer fails to act on any request for payment within 30 days after it is submitted, or the Owner fails to pay the Contractor substantially the sum approved by the Engineer or awarded by arbitrators within 30 days of its approval and presentation, then the Contractor may, after 10 days from delivery of a written notice to the Owner and the Engineer, terminate the Contract and recover from the Owner payment for all work executed and all expenses sustained. In addition and in lieu of terminating the Contract, if the Engineer has failed to act on a request for payment or if the Owner has failed to make any payment as aforesaid, the Contractor may upon 10 days written notice to the Owner and the Engineer stop the work until it has been paid all amounts then due, in which event and upon

resumption of the work, Change Orders shall be issued for adjusting the Contract Price or extending the Contract Time or both to compensate for the costs and delays attributable to the stoppage of the work.

- 20.6 If the performance of all or any portion of the work is suspended, delayed, or interrupted as a result of a failure of the Owner or Engineer to act within the time specified in the Contract Documents, or if no time is specified, within a reasonable time, an adjustment in the Contract price or an extension of the Contract Time, or both, may be made by Change Order to compensate the Contractor for the costs and delays necessarily caused by the failure of the Owner or Engineer.

21.0 Scope of Payment

- 21.1 The Contractor shall receive and accept compensation provided for in the Contract as full payment for furnishing all labor, materials and equipment and for performing all work under the Contract in a complete and acceptable manner and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the prosecution thereof, except as otherwise provided in the Contract Documents.

22.0 Compensation for Altered Quantities

- 22.1 When the accepted quantities of work vary from the quantities in the bid schedule, the Contractor shall accept as payment in full, so far as Contractor items are concerned, payment at the original contract item prices for the accepted quantities of work done. No allowance except as provided in General Conditions will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the Contract items of overhead expense on the part of the bidder and subsequent loss of expected reimbursements therefor or from any other cause.
- 22.2 Increased work involving supplemental agreements shall be paid for as stipulated in such agreements. The Contractor shall furnish substantiating data required in the preparation of these agreements.

23.0 Extra Work and Force Account Work

- 23.1 The Contractor shall perform unforeseen work, for which there is no price included in the Contract, whenever it is deemed necessary or desirable in order to complete fully the work as contemplated. Such work shall be performed in accordance with the specifications and as directed by the Owner.
- 23.2 Extra work performed in accordance with the requirements and provisions of the Owner will be paid for at the item prices or lump sum stipulated in the order authorizing the work, or the Owner may require the Contractor to do such work on a force account basis to be compensated in the following manner:

- (a) Labor. For all labor and for all foremen in direct charge of the specific operations, the Contractor shall receive the rate of wage and fringe benefits currently in effect at the time the work is performed for each and every hour that said labor and foremen are actually engaged in such work, to which may be added an amount equal to 30 percent of the sum thereof. The term fringe benefits shall be defined as the actual costs paid to, or in behalf of, workers by reason of health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by a collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work. In addition to the above, the Contractor shall receive the actual cost of Social Security Tax, Workers' Compensation and State and federal unemployment insurance. In lieu of itemizing these four items, 15% of the sum of wages and fringe benefits may be added.

The wages of any foreman or timekeeper who is employed partly on force account work and partly in other work, shall be prorated between two classes of work according to the number of workers employed on each class of work as shown by the payrolls.

The Contractor shall receive the actual costs paid for subsistence and travel allowances when such payments are required by a collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work. No percentage may be added to these costs.

- (b) Materials. For materials accepted by the Engineer and used, the Contractor shall receive the actual cost of such materials delivered to the work site, including transportation charges paid (exclusive of machinery rentals as hereinafter set forth), to which cost 15% may be added.
- (c) Equipment. For any machinery or special equipment other than small tools which it may be deemed necessary or desirable to use, the Contractor shall be allowed a rental price to be agreed upon in writing before such work is begun, for the time that such equipment is in use on the work. No profit or overhead shall be added to any charges in connection with the use of owned equipment, but 15% of the basic amount payable for rented equipment may be added for overhead and profit. Proper invoices will be required for rental equipment.
- (d) Foreman's Transportation. A flat hourly rate, which includes fuel and lubricants, profit and overhead, and any other costs will be allowed for the foreman's transportation.
- (e) Fuel and Lubricants. For all equipment except the foreman's transportation (for which an all-inclusive flat rate is allowed), 15% of the basic equipment allowance may be added for cost of fuel and lubricants.

- (f) Subcontract Work. For work performed by an approved subcontractor, the Contractor will be allowed an amount to cover administrative costs, equal to 5% of the compensation provided in (a), (b), (c), (d) and (e) but not exceeding \$5,000.00.
- (g) Compensation. The compensation to the Contractor as above provided in (a), (b), (c), (d), (e) and (f) shall constitute payment in full for extra work done on a force account basis including administration, superintendence, overhead, use of tools and equipment for which no rental is allowed, profit, taxes other than sales tax, premium on insurance, and any other expense incidental to performing the force account work. Sales tax will not be allowed on any item for which tax exemption may be obtained.
- (h) Statements. Final payment will not be made for work performed on a force account basis until the Contractor has furnished the Engineer with quadruplicate itemized statements of the cost of such force account work detailed as follows:
 - (1) Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman.
 - (2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
 - (3) Quantities of materials, prices, and extensions.
 - (4) Transportation of materials.

23.3 The Contractor's representative and the Engineer shall compare records daily of the cost of work done as ordered on a force account basis. The Engineer shall certify that these records are correct.

23.4 Statements shall be accompanied and supported by proper invoices for all materials used and transportation charges, and rented equipment performing work on force account operations. However, if materials used on the force account work are not specifically purchased for such work but are produced by the Contractor or taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were produced by it or taken from its stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor. Statements shall be filed not later than the 20th day of the month following that in which the work was actually performed.

23.5 The above described force account provisions will also apply to work performed at agreed unit prices and agreed lump sums when the agreed prices are based on analyses of cost of labor, material and equipment.

24.0 Eliminated Items

24.1 Should any items contained in the proposal be found unnecessary for the proper completion of the work, the Owner may, upon written order to the Contractor, eliminate such items from the Contract, and such action shall in no way invalidate the Contract. When a Contractor is notified of the elimination of items, it will be reimbursed for actual work done and all costs incurred, including mobilization of materials prior to the notification.

25.0 Claims for Adjustment and Disputes

25.1 If, in any case, the Contractor deems that additional compensation is due for work or material not clearly covered in the Contract or not ordered by the Owner as extra work, as defined herein, the Contractor shall notify the Owner in writing of its intention to make claim for such additional compensation before the work on which it bases its claim has begun. If such notification is not given, and the Owner is not afforded proper facilities by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor, and the fact that the Owner has kept account of the cost as aforesaid shall not in any way be construed as proving or substantiating the validity of the claim. If the claim, after consideration by the Owner, is found to be just, it will be paid as extra work as provided herein for force account work. Nothing in this subsection shall be construed as establishing any claim contrary to the terms of Sections 17 and 18 of these General Conditions.

26.0 Payments to Contractor

26.1 Partial payments to the Contractor for labor performed shall be made at the rate of 92% of the estimates prepared by the Contractor and approved by the Engineer. All labor performed after the project is 50% completed shall be paid for at the rate of 100% of the estimates submitted by the Contractor and approved by the Engineer 30 days after the date of the approved estimate. In addition to all other payments made to the Contractor on account of work performed, the Owner shall pay the Contractor a sum at the rate of 92% of the invoice costs, for material delivered to the site of the work, provided such materials have been inspected and found to meet the specifications. After the project is fifty percent 50% completed the balance of such invoiced value shall be paid when such material is incorporated into and becomes a part of the work. Payment on approved estimates filed with the Owner shall be made within 30 days. All retained funds after 50% completion shall be deposited in an escrow account with one or more banks or building and loan associations in the state selected by mutual agreement between the Contractor and the Owner at the time the contract is executed. The sums retained by the Owner under this section shall be held by the Owner until completion of the entire work and shall be held by the Owner as guarantee of the performance by the Contractor of all conditions contained in the Contract. The Contractor shall cooperate with the

Owner in the opening of the escrow account and shall accompany the Owner's representatives for such purpose to the financial institution of their mutual choice.

- 26.2 The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- 26.3 Prior to Substantial Completion, the Owner, with the approval of the Engineer and with the concurrence of the Contractor, may use any completed or substantially completed portions of the work. Such use shall not constitute an acceptance of such portions of the work.
- 26.4 The Owner shall have the right to enter the premises for the purpose of doing work not covered by the Contract Documents. This provision shall not be construed as relieving the Contractor of the sole responsibility for the care and protection of the work, or the restoration of any damaged work except such as may be caused by agents or employees of the Owner.
- 26.5 Upon completion of the work, the Engineer shall issue a letter attached to the final payment request, recommending that the work be accepted by the Owner. The entire balance found to be due the Contractor, including the retained percentages with accumulated interest, but except such sums as may be lawfully retained by the Owner, shall be paid to the Contractor within 30 days of completion and acceptance of the work by the Owner.
- 26.6 The Contractor will indemnify and save the Owner or the Owner's agents less from all claims growing out of the lawful demands of subcontractors, laborers, workers, mechanics, material suppliers, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the work.
- 26.7 The Contractor shall deliver to the Owner either prior to or concurrently with the final estimate the Contractor's Affidavit of Payment listing all suppliers of material and all persons performing labor under and by virtue of this Contract. The Contractor shall also supply, at this time, waivers of mechanics' liens from all material suppliers and all persons performing labor as listed in the Contractor's Affidavit of Payment. The Contractor will be responsible for obtaining its subcontractors the affidavits of payment and waivers of mechanics' liens for the subcontractors' portion of the work. If the Contractor fails to do so the Owner may, after having notified the Contractor, either pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged, whereupon payment to the Contractor shall be resumed, in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor, its Surety, or any third party. In paying any unpaid bills of the Contractor, any payment so made by the Owner shall be

considered as a payment made under the Contract Documents by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments made in good faith.

27.0 Acceptance of Final Payments as Release

27.1 The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor, its subcontractors, heirs, executors, administrators, successors and assigns. Any payment, however, final or otherwise, shall not release the Contractor, its subcontractors, heirs, executors, administrators, successors and assigns or its Surety from any obligations under the Contract Documents.

28.0 Contract Security

28.1 The Contractor shall within 10 days after the receipt of the Notice of Award furnish the Owner with a contract bond, if applicable, in penal sums equal to the amount of the Contract Price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions, and agreements of the Contract Documents, and upon the prompt payments by the Contractor to all persons supplying labor and materials in the prosecution of the work provided by the Contract Documents. Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and must not exceed the underwriting limitation. Surety companies and their agents or attorneys-in-fact must be authorized to transact business in the state of Ohio as evidenced by the issuance of a Certificate of Compliance by the Ohio Department of Insurance. The expense of the contract bond shall be borne by the Contractor. If at any time a Surety on any such bond is declared bankrupt or loses its right to do business in the state of Ohio or is removed from the list of surety companies accepted on federal bonds (for federally-funded projects), the Contractor shall, within 10 days after the happening of any of the above-described events, substitute an acceptable bond in such form and sum, and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on such replacement bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable bond to the Owner.

29.0 Assignments

29.1 Neither the Contractor nor the Owner shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of its right, title or interest therein, or its obligations thereunder, without written consent of the other party.

30.0 Indemnification

- 30.1 The Contractor will indemnify and hold harmless the Owner and the Engineer and their officers, agents, and employees from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance of the work; provided that any such claims, damage, loss or expense is attributable to (i) bodily injury, sickness, disease or death, or (ii) the risk of injury to tangible property, or the injury to or destruction of tangible property, including the loss of use resulting therefrom, and is caused in whole or in part by any negligent or willful act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.
- 30.2 In any and all claims against the Owner or the Engineer, or any of their agents or employees, by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- 30.3 The obligation of the Contractor under this paragraph shall not extend to the liability of the Engineer, its agents or employees arising out of the preparation or approval of maps, plans, opinions, reports, surveys, change orders, designs or specifications.

31.0 Patented Devices, Materials and Processes

- 31.1 If the Contractor employs any design, device, material, or process covered by letters of patent or copyright, it shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor and the Surety shall indemnify and save harmless the Owner, any affected third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process or any trademark or copy right, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of any infringement, at any time during the prosecution or after the completion of the work.

32.0 Subcontractors

- 32.1 The "Proposed Use of Subcontractors For Specific Portions of the Work" bid form shall be a basis for evaluating Bids. No Bid shall be considered by the Owner unless such bid form is completed and submitted with the Bid. The Owner shall

not reject any such listed subcontractor(s) after the Contract award has been made by the Owner.

- 32.2 The Contractor shall not, without the written permission and approval of the Owner, subcontract any additional portions of the work to be performed under this Contract.
- 32.3 In the event that the Contractor desires to subcontract any additional portions of the work, it shall first submit to the Owner a statement showing the nature of the work to be subcontracted and the name and street address of the party or parties to whom it is proposed to subcontract. The decision of the Owner as to its approval shall be final and binding.
- 32.4 The approval of subcontractor(s) by the Owner shall not directly or indirectly release or modify the responsibility of the Contractor for the satisfactory and entire completion of the work under this Contract, and each and every part, and portion thereof.
- 32.5 In case any party or parties to whom any work under this Contract shall have been subcontracted shall disregard the direction of the Engineer or its duly authorized representatives, or shall furnish any unsatisfactory work or shall fail or refuse in any way to conform to any of the conditions of this Contract, then, upon written order of the Engineer the Contractor shall require the party or parties in default to discontinue any work under this Contract.
- 32.6 Any defective work performed by a subcontractor shall be removed and replaced with work which is satisfactory to the Engineer and without cost to the Owner.
- 32.7 Nothing contained in this Contract shall create any contractual relation between any subcontractor and the Owner.
- 32.8 The Contractor shall provide the Owner with a list of names and telephone numbers of the designated employees for each subcontractor to be contacted in case of emergency during non-working hours. A copy of this list shall also be displayed on the job site.

33.0 Guaranty

- 33.1 The Contractor shall guarantee that the work is free from all defects due to faulty materials or workmanship for a period of 1 year from the date of Final Acceptance of the work by the Owner. This guaranty period shall be covered by the Bid Guaranty and Contract Bonds. The Contractor shall, during the life of this guaranty, promptly make all repairs or changes in the work which, in the opinion of the Project Engineer, are necessary as a result of defects due to faulty materials or workmanship. The Owner shall give the Contractor notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make the necessary repairs or changes, the Owner may do so, and the Contractor and its

Surety shall be liable for all expenses incurred by the Owner in making said repairs or changes.

34.0 Dispute Resolution and Administrative Claim Process

34.1 Whenever an issue is elevated to a dispute, the parties shall exhaust the *City of Worthington*'s Dispute Resolution and Administrative Claim process as set forth below prior to filing an action in any court of competent jurisdiction. The following procedures do not compromise the Contractor's right to seek relief in any court of competent jurisdiction.

All parties to the dispute must adhere to the Dispute Resolution and Administrative Claim process. Do not contact *City of Worthington* personnel who are to be involved in a Step 2 or Step 3 review until a decision has been issued by the previous tier. *City of Worthington* personnel involved in Step 2 or Step 3 reviews will not consider a dispute until the previous tier has properly reviewed the dispute and issued a decision.

Failure to meet any of the timeframes outlined below or to request an extension may terminate further review of the dispute and may serve as a waiver of the Contractor's right to file a claim.

Disputes and claims by subcontractors and suppliers may be pursued by the Contractor on behalf of subcontractors or suppliers. Disputes and claims by subcontractors and suppliers against the *City of Worthington* but not supported by the Contractor will not be reviewed by the *City of Worthington*. Disputes and claims of subcontractors and suppliers against the Contractor will not be reviewed by the *City of Worthington*.

Continue with all work, including that which is in dispute. The *City of Worthington* will continue to pay for work not in dispute.

The *City of Worthington* will not make the adjustments allowed by 104.02.B, 104.02.C, and 104.02.D of the 2019 ODOT Construction and Materials Specifications if the Contractor did not give notice as specified above. This provision does not apply to adjustments provided in Table 104.02-2 of the 2019 ODOT CMS.

Step 1 (On-Site Determination): Contractor should provide immediate oral notification to the *Construction Engineer* upon discovering a circumstance that may require a revision to the Contract Documents or may result in a dispute. Upon notification, the Construction Engineer will attempt to resolve the identified issue as quickly as possible.

If the Construction Engineer has not resolved the identified issue within two (2) working days after receipt of oral notification, provide written notice to the *City*

Engineer of any circumstance that may require a revision to the Contract Documents.

The City Engineer will meet with the Contractor's superintendent within two (2) working days of receipt of the Contractor Written Early Notice set forth in 108.02.F of the 2019 ODOT CMS. They will review all pertinent information and contract provisions and negotiate in an effort to reach a resolution according to the Contract Documents.

The City Engineer will issue a written decision of Step 1 within fourteen (14) calendar days of the meeting and receipt of substantiating documentation. If the dispute is not resolved, either abandon or escalate the dispute to Step 2.

Step 2 (City of Worthington Dispute Resolution Committee): The **City of Worthington** Dispute Resolution Committee will be responsible for hearing and deciding disputes at the Step 2 level. The committee will consist of **City Engineer** and **City Manager** or designees (other than the project personnel involved).

Within seven (7) calendar days of receipt of the Step 1 decision, submit a written request for a Step 2 meeting to the **City Engineer**. The **City Engineer** will assign the dispute a dispute number. Within fourteen (14) calendar days of receipt of the request for a Step 2 meeting, submit the dispute documentation as follows:

- a. Submit three (3) complete copies of the documentation of the dispute to the **City Engineer**.
- b. Identify the dispute on a cover page by county, project number, Contractor name, subcontractor or supplier (if involved in the dispute), and dispute number.
- c. Clearly identify each item for which additional compensation and/or time is requested.
- d. Provide a detailed narrative of the disputed work or project circumstance at issue. Include the dates of the disputed work and the date of early notice.
- e. Reference the applicable provisions of the plans, specifications, proposal, or other contract documents in dispute. Include copies of the cited provisions in the dispute documentation.
- f. Include the dollar amount of additional compensation and length of contract time extension requested.
- g. Include supporting documents for the requested compensation stated in letter (f) above.
- h. Provide a detailed schedule analysis for any dispute involving additional contract time, actual or constructive acceleration, or delay damages. At a minimum, this schedule analysis must include the Schedule Update immediately preceding the occurrence of the circumstance alleged to have

caused delay and must comply with accepted industry practices. Failure to submit the required schedule analysis will result in the denial of that portion of the Contractor's request.

- i. Include copies of relevant correspondence and other pertinent documents.

Within fourteen (14) calendar days of receipt of the Contractor's dispute documentation, the committee will conduct the Step 2 meeting with the Contractor personnel who are authorized to resolve the dispute. The committee will issue a written decision of Step 2 within fourteen (14) calendar days of the meeting. If the dispute is not resolved, either abandon or escalate the dispute to Step 3.

Step 3 Hired Neutral Third Party (Mediation): Submit a written Notice of Intent to File a Claim to the *City Law Director* who will serve as the Dispute Resolution Coordinator (DRC), within fourteen (14) calendar days of receipt of the Step 2 decision.

The dispute becomes a claim when the DRC receives the Notice of Intent to File a Claim.

Submit six (6) complete copies of the claim documentation to the DRC within thirty (30) calendar days of receipt of the Notice of Intent to File a Claim. This timeframe may be extended upon mutual agreement of the parties and with approval of the DRC.

In addition to the documentation submitted at Step 2:

- a. Enhance the narrative to include sufficient description and information to enable understanding by a third party who has no knowledge of the dispute or familiarity with the project.
- b. Certify the claim in writing and under oath using the following certification:

"I, (Name and Title of an Officer of the Contractor) certify that this claim is made in good faith, that all supporting data is accurate and complete to the best of my knowledge and belief, and that the claim amount accurately reflects the contract amendment for which (Contractor Company name) believes the City of Worthington is liable."

Sign and date this claim certification and have the signature notarized pursuant to the laws of the State of Ohio. The date the DRC receives the certified claim documentation is the date of the *City of Worthington's* Receipt of the Certified Claim for the purpose of the calculation of interest as defined in 108.02.G.4 of the 2019 ODOT CMS.

- c. An overview of the project.

- d. Response to each argument set forth by the Contractor.
- e. Any counterclaims, accompanied by supporting documentation, *City of Worthington* wishes to assert.

The *(City Law Director)* will then choose Mediation in the manner in which those methods are practiced by the *City of Worthington* and allowed by law. The DRC will coordinate the agreement of the parties to the Mediation, and the selection of a Mediator. The fees of the Mediator will be shared equally between the *City of Worthington* and the Contractor. The DRC will obtain a written agreement, signed by both parties, that establishes the Mediation process. The Mediator will have complete control of the claim upon execution of the Mediation agreement.

The Moderator will render a decision within sixty (60) calendar days of the hearing. Within thirty (30) calendar days of receipt of the Moderator's decision, either accept or reject the decision in writing. In the event the Contractor fails to do so, the *(City Manager)* may revoke any offers of settlement contained in the decision.

Mediation is the final step of the *City of Worthington's* Dispute Resolution Process.

35.0 Taxes

- 35.1 The Contractor shall withhold all City of Worthington income taxes due or payable under the provisions of Part Seventeen – Title Two of the Codified Ordinances of the City of Worthington, Ohio, for wages, salaries, and commissions paid to its employees, and shall require any of its subcontractors to withhold any such City of Worthington income taxes due under Part Seventeen – Title Two for services performed under this Contract.

36.0 Nondiscrimination in Employment

- 36.1 In connection with the performance of work under this Contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, military status, national origin, disability, age, or ancestry, or any other class protected by law. The aforesaid provision shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment, or recruitment advertising, layoff or selection for training including apprenticeship. The Contractor shall post notices in conspicuous places setting forth the provisions of this nondiscrimination clause for the benefit of employees or applicants for employment.

37.0 Contract Work Performed by the Owner

37.1 In the event that it becomes necessary for the Owner to perform work of an immediate nature (such as the placement of barricades or replacement of signs or other warning or protective devices) required of the Contractor by this Contract because of a failure or refusal of the Contractor to perform such work, the Contractor shall reimburse the Owner for the actual cost of the labor, materials and equipment necessary to perform such work plus a reasonable overhead amount. The Owner shall be required to notify or attempt to notify the designated representative of the Contractor of the necessity to perform such work. If the Contractor refuses or fails within a reasonable time to perform or cause the performance of such work, the Owner shall perform it and shall be reimbursed by the Contractor for same.

38.0 Certified Payroll

38.1 The Contractor shall post in a prominent and accessible place on the site of the work a legible statement of the schedule of wage rates specified in the Bid Documents to the various classifications of laborers, workers, and mechanics employed. This statement shall remain posted during the life of the Contract.

38.2 The Contractor shall, as soon as it begins performance under the Contract, supply to the prevailing wage coordinator of the Owner a schedule of the dates during the life of the Contract on which it is required to pay wages to employees. The Contractor shall also deliver to the prevailing wage coordinator a certified copy of the payroll within two weeks after the initial pay date, and supplemental reports for each month thereafter. If the life of the Contract is expected to be no more than 4 months from the beginning of performance by the Contractor, such supplemental reports shall be filed each week after the initial report. The certification of each payroll shall be executed by the Contractor or duly-appointed agent thereof and shall recite that the payroll is correct and complete and that the wage rates shown are not less than those required by Chapter 4115 of the Ohio Revised Code. The Contractor shall be responsible for the submission of payroll copies from all subcontractors.

38.3 The Contractor shall make unemployment records available for inspection by authorized representatives of the Owner and will permit employees to be interviewed during working hours by these representatives.

38.4 All monthly payrolls shall contain or have attached the following:

- (a) The name, employer identification number, and social security number of each employee.
- (b) The current address of the employee.

- (c) The job classification of the employee (same as shown on wage determination or provisional approval).
 - (d) The rate of pay.
 - (e) The hours worked each day and total for each week.
 - (f) The fringe payments and deductions made.
- 38.5 The failure by the Contractor to furnish and submit the above information as part of the required monthly Certified Payroll will be cause for the Owner to withhold the preparation of the monthly estimate. In the event of a violation of the wage rate provisions by the Contractor or any subcontractor, the Owner may, after notice to the Contractor, suspend further payments or proceed to terminate the Contract as provided by other sections of the Contract.
- 38.6 The Contractor shall file with the Owner upon completion of the project and prior to final payment therefor an Affidavit of Final Payment stating that it has fully complied with Sections 4115.03 to 4115.16 of the Ohio Revised Code. The Contractor shall also be responsible for obtaining such Affidavits from all subcontractors and for forwarding the subcontractors' affidavits to the Owner.
- 38.7 This provision shall not apply to public improvements where the federal government or any of its agencies furnishes by loan or grant all or any part of the funds used in constructing such improvements, provided the federal government or any of its agencies prescribes predetermined minimum wages to be paid to mechanics and laborers employed in the construction of such improvements.
- 38.8 The Department of Industrial Relations shall file with the Secretary of State a list of contractors and subcontractors whom it finds have been prosecuted and convicted for violations of Sections 4115.03 to 4115.16 of the Ohio Revised Code, and each such contractor or subcontractor is prohibited from contracting directly or indirectly with any public authority for the construction of a public improvement or from performing any work on the same as a contractor or subcontractor for a period of two years from the date of conviction. The Owner shall not award a contract for a public improvement to any contractor or subcontractor during the time that its name appears on such list. The filing of the notice of conviction with the Secretary of State shall constitute notice to all public authorities.

39.0 Utilities

- 39.1 The Contractor shall notify all utility companies, all pipe line owners, or other parties affected by the project, and have all necessary adjustments of the public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction made as soon as practicable.

- 39.2 Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, and all other utility appurtenances within the limits of the proposed construction which are to be relocated or adjusted are to be moved by the utility company or its authorized designee, except as otherwise provided for in the special provisions or as noted on the plans.
- 39.3 It is understood and agreed that the Contractor fully considered in its bid the financial impact or otherwise of all known permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed to the Contractor for any delays, inconvenience or damage sustained by it due to any interference from known utility appurtenances or the operation of moving said utility appurtenances.

SUPPLEMENTARY SPECIFICATIONS
AND SPECIAL CONDITIONS

Item 201- All trees shown all plan have been removed by the City. The tree stumps/roots are still remaining and shall be removed by contractor.

NOTICE OF COMMENCEMENT
OF PUBLIC IMPROVEMENT

AFFIDAVIT OF PAYMENT

WAIVERS OF MECHANICS' LIENS

PAYROLL INFORMATION

AND

FINAL PAYMENT AFFIDAVIT

Notice of Commencement of Public Improvement

Notice is hereby given in accordance with §1311.252 of the Ohio Revised Code of the commencement of the Public Improvement identified as:

Project Name **Selby Blvd West Bridge Replacement**

PID. **116037**

Project Location Selby Blvd West Bridge, Worthington, OH 43085, Franklin County, Ohio

Date of Contract _____

Public Authority

The Public Authority responsible for the Public of an Improvement is:

The City of Worthington
6550 North High Street
Worthington, Ohio 43085

Designated Representative

The representative to whom service affidavit may be made is:

John Moorehead, P.E.,
The City of Worthington
380 Highland Avenue
Worthington, Ohio 43085

Affidavit

I certify or affirm that to the best of my knowledge, the information provided in this document is true and correct and that I am fully authorized to provide this Notice.

Affiant:
The City of Worthington

John Moorehead, P.E.,

The Affiant acknowledged and signed this instrument before me, a Notary Public in and for the County of _____, State of Ohio on the ____ day of _____, 20__.

Notary Public

Contractor

Surety

Name _____
Address _____
City, State, Zip _____

Name _____
Address _____
City,State,Zip _____

This Notice will be posted on the Project site by the Contractor and available from the Public Authority at www.worthington.org.

Affidavit of Payment

Project Name: Selby Blvd West Bridge Replacement

Contractor:

PID 116037

By signing this Affidavit of Payment, the Contractor certifies that it and all of its Subcontractors and Material Suppliers have fully complied with Chapter 4115 of the Ohio Revised Code (“ORC”), “Wages and Hours on Public Works,” for the Project noted above, and that all Subcontractors and Material Suppliers have been paid in full for all Work performed or materials furnished for the Contract except (check all that apply):

- Amounts that will be paid from payment(s) now due to the Contractor.
- Amounts for liens which the Contractor previously disputed and resolved with the City by providing a bond pursuant to ORC §1311.311.
- No exceptions.

Affiant:

_____ (Name of Contractor or Subcontractor)

By _____

Print Name _____

Title _____

The Affiant acknowledged and signed this instrument before me, a Notary Public in and for the County of _____, State of Ohio on the _____ day of _____, 20__.

Notary Public

Conditional Partial Waiver of Mechanics' Lien

Project Name: Selby Blvd West Bridge Replacement

PID 116037

Progress Payment No. _____

TO ALL WHOM IT MAY CONCERN:

Upon the receipt of the sum of \$ _____ as Progress Payment No. ____, the undersigned, subject to the reservations contained herein below, does hereby waive, release and relinquish any and all liens and claims for liens for labor or work performed and/or material furnished through the _____ day of _____, 20__ (“Effective Date of the Progress Payment”) on or to the above referenced Project, located at _____ and owned by the City of Worthington, Ohio.

Nothing in this Partial Waiver of Mechanics' Lien shall waive or otherwise affect lien rights for retainage now being held by the Contractor on the Project for labor or work performed and/or material furnished prior to the Effective Date of the Progress Payment.

Additionally, nothing in this Partial Waiver of Mechanics' Lien shall in any way affect the priority of any lien filed after the date hereof. Further, the undersigned specifically reserves all lien rights for labor or work performed and/or material furnished after the Effective Date of the Progress Payment on or to the above referenced Project.

THE INDIVIDUAL SIGNING THIS PARTIAL WAIVER OF MECHANICS' LIEN ON BEHALF OF THE UNDERSIGNED WARRANTS THAT HE/SHE HAS FULL AUTHORITY TO EXECUTE THIS DOCUMENT.

_____ (Name of Contractor or Subcontractor)

By _____

Print Name _____

Title _____

Date: _____

Acknowledged and signed before me, a Notary Public in and for the County of _____, State of Ohio on the _____ day of _____, 20__.

Notary Public

Conditional Waiver of Mechanics' Lien

Project Name **Selby Blvd West Bridge Replacement**

PID 116037

TO ALL WHOM IT MAY CONCERN:

Upon the receipt of the sum of \$ _____, the undersigned does hereby waive, release and relinquish any and all liens and claims for liens for labor or work performed and/or material furnished on or to the above referenced Project, located at _____ and owned by the City of Worthington, Ohio.

The undersigned agrees to serve a new Notice of Furnishing if the undersigned furnishes additional material or performs additional labor or work on or to the above referenced Project after the date hereof, and for which the undersigned wishes to reserve lien rights against the Project.

THE INDIVIDUAL SIGNING THIS WAIVER OF MECHANICS' LIEN ON BEHALF OF THE UNDERSIGNED WARRANTS THAT HE/SHE HAS FULL AUTHORITY TO EXECUTE THIS DOCUMENT.

_____ (Name of Contractor or Subcontractor)

By _____

Print Name _____

Title _____

Date: _____

Acknowledged and signed before me, a Notary Public in and for the County of _____, State of Ohio on the _____ day of _____, 20__.

Notary Public

Unconditional Partial Waiver of Mechanics' Lien

Project Name Selby Blvd West Bridge Replacement

PID 116037

Progress Payment No. _____

TO ALL WHOM IT MAY CONCERN:

The undersigned, in consideration of the sum of \$ _____ as Progress Payment No. _____, the receipt of which is hereby acknowledged, subject to the reservations contained herein below, does hereby waive, release and relinquish any and all liens and claims for liens for labor or work performed and/or material furnished through the _____ day of _____, 20____ (“Effective Date of the Progress Payment”) on or to the above referenced Project, located at _____ and owned by the City of Worthington, Ohio.

Nothing in this Partial Waiver of Mechanics' Lien shall waive or otherwise affect lien rights for retainage now being held by the Contractor on the Project for labor or work performed and/or material furnished prior to the Effective Date of the Progress Payment.

Additionally, nothing in this Partial Waiver of Mechanics' Lien shall in any way affect the priority of any lien filed after the date hereof. Further, the undersigned specifically reserves all lien rights for labor or work performed and/or material furnished after the Effective Date of the Progress Payment on or to the above referenced Project.

THE INDIVIDUAL SIGNING THIS PARTIAL WAIVER OF MECHANICS' LIEN ON BEHALF OF THE UNDERSIGNED WARRANTS THAT HE/SHE HAS FULL AUTHORITY TO EXECUTE THIS DOCUMENT.

(Name of Contractor or Subcontractor)

By _____

Print Name _____

Title _____

Date: _____

Acknowledged and signed before me, a Notary Public in and for the County of _____, State of Ohio on the _____ day of _____, 20____.

Notary Public

Unconditional Waiver of Mechanics' Lien

Project Name Selby Blvd West Bridge Replacement

PID **116037**

TO ALL WHOM IT MAY CONCERN:

The undersigned, in consideration of the sum of \$ _____, the receipt of which is hereby acknowledged, does hereby waive, release and relinquish any and all liens and claims for liens for labor or work performed and/or material furnished on or to the above referenced Project, located at _____ and owned by the City of Worthington, Ohio.

The undersigned agrees to serve a new Notice of Furnishing if the undersigned furnishes additional material or performs additional labor or work on or to the above referenced Project after the date hereof, and for which the undersigned wishes to reserve lien rights against the Project.

THE INDIVIDUAL SIGNING THIS WAIVER OF MECHANICS' LIEN ON BEHALF OF THE UNDERSIGNED WARRANTS THAT HE/SHE HAS FULL AUTHORITY TO EXECUTE THIS DOCUMENT.

_____ (Name of Contractor or Subcontractor)

By _____

Print Name _____

Title _____

Date: _____

Acknowledged and signed before me, a Notary Public in and for the County of _____, State of Ohio on the ____ day of _____, 20__.

Notary Public

Payroll Information

Project Name Selby Blvd West Bridge Replacement
PID. 116037

The undersigned hereby certifies:

1. That he/she pays or supervises the payment of the persons employed by _____ (the "Contractor" or the "Subcontractor") for the above referenced Project.

2. That during the payroll period commencing on the ____ day of _____, 20__ and ending on the ____ day of _____, 20__, all persons employed on the above referenced Project have been paid the full weekly wages earned; that no rebates have been or will be made either directly or indirectly to or on behalf of the Contractor/Subcontractor from the full weekly wages earned by such persons; and that no deductions have been made either directly or indirectly from the wages earned by such persons, other than permissible deductions, as follows:

_____ (none if nothing inserted).

3. That any payrolls under the Contract for the above referenced Project (the "Contract") for the above period are correct and complete; that the wage rates for laborers or mechanics contained therein are not less than the applicable wage rates contained in the specifications as supplied by the Ohio Department of Commerce or any wage determination incorporated into the Contract and that the classifications set forth therein for each laborer or mechanic conform with the work he/she performed.

4. That any apprentices employed in the above period are duly registered in a bona fide apprenticeship program registered with the Ohio Apprenticeship Council.

5. That: (a) where fringe benefits are paid to approved plans, funds, or programs, in addition to the basic hourly wage rates paid to each laborer or mechanic listed in the above referenced payroll, payments of fringe benefits listed in the Contract have been or will be made to appropriate programs for the benefit of such employees; and (b) where fringe benefits are paid in cash, each laborer or mechanic listed in the above referenced payroll has been paid as indicated on the payroll, an amount not less than the sum of the applicable basic hourly wage rate plus the amount of the required fringe benefits as listed in the Contract.

THE WILLFUL FALSIFICATION OF ANY OF THE ABOVE STATEMENTS MAY SUBJECT THE CONTRACTOR OR THE SUBCONTRACTOR TO FINES AS DESCRIBED IN SECTION 4115.99 OF THE OHIO REVISED CODE.

Date: _____

_____ (Name of Contractor or Subcontractor)

By _____

Print Name _____

Title _____

Final Payroll Affidavit (Contractor or Subcontractor)

Project Name Selby Blvd West Bridge Replacement

PID 116037

The undersigned hereby certifies:

1. That he/she pays or supervises the payment of the persons employed by _____ (the "Contractor" or the "Subcontractor") for the above referenced Project.

2. That the wages paid to all employees for the full number of hours worked in connection with the Contract for the above referenced Project (the "Contract") during the following period from _____ to _____ is in accordance with the prevailing wages prescribed by the Contract.

3. That no rebates or deductions for any wages due any person have been directly or indirectly made other than those provided by law.

Affiant:

Company Name _____

By _____

Print Name _____

Title _____

The Affiant acknowledged and signed this instrument before me, a Notary Public in and for the County of _____, State of Ohio on the _____ day of _____, 20__.

Notary Public

ATTACHMENT A: PREVAILING WAGES

[ATTACH UPDATED AND COMPILED WAGE INFO ON FOLLOWING PAGE]

ATTACHMENT B: PROJECT PLANS

GEOTECHNICAL REPORT (ATTACHMENT C)

BIDDING PROCESS

Selby Blvd West Bridge Replacement PID 116037

In an effort to make the solicitation process more efficient and cost effective for both vendors and the City of Worthington, the City has adopted an electronic bidding process for projects subject to competitive bidding. Electronic bids will be submitted at the **bidexpress.com** website as the primary method of bid submission. All electronic bidders must first register on **bidexpress.com** and create an Info Tech Digital ID for free, which is used to digitally sign bids. Digital IDs/Signatures assures the agency knows who the bid is really from (forgery resistance), ensures that no one can alter a bid (non-repudiation), prevents the information in a bid from disclosure to unauthorized parties (secrecy), and safeguards that even authorized parties cannot access them prior to the public opening (sealing).

It can take up to five business days to process your Digital ID and it is highly recommended that a Digital ID be enabled 48 hours in advance of submitting an electronic bid. Please plan accordingly. Instead of paying paper bidding costs (hand or hired delivery costs), a fee of \$25 will be incurred for those who wish to bid electronically on a pay-per-solicitation basis. Alternatively, you may subscribe for \$50 per month for unlimited electronic bid submission to all agencies that post solicitations on the **bidexpress.com** website, plus get email notifications by agency/worktype/commodity code.

For bidders who are bidding online and wish to utilize the electronic bid bond option, please see the **FAQs** page regarding electronic bid bonds (bottom of the page in the link).

For additional guidance, please contact the Bid Express team toll free at (888) 352-2439 (select option 1) or at support@bidexpress.com.

Paper bid sets will not be provided by the Department of Service & Engineering, though registered plan holders may download and print a paper set at their own expense.

Plans, specifications and related information may also be viewed electronically at the Department of Service & Engineering, 380 Highland Ave., Worthington, OH 43085.

The City of Worthington shall not be responsible for full or partial sets of Contract Documents obtained from any other source.

The Engineer's estimate of construction cost for this project is **\$1,145,132.00**

The City of Worthington reserves the right to reject any and all bids and to waive irregularities in bidding.

A Pre-Bid Meeting will be held at the City of Worthington Engineering Offices located at 380 Highland Ave. Worthington, Ohio 43085 on **April 22, 2024 at 12:00 PM**. The meeting is not mandatory.

Only contractors pre-qualified with ODOT are eligible to submit bids for this project. Pre-qualification status must be in force at the time of bid, at the time of award, and through the life of the construction contract. For work types that ODOT does not pre-qualify, the LPA must still

select a qualified contractor. Subcontractors are not subject to the pre-qualification requirement. The "prime" contractor must perform no less than 30 percent of the total original contract price.

By submission of bid/proposal of bid/proposal the bidder, contractor, subcontractor, supplier or vendor agrees to comply with Section IX and Section X as a part of the Required Contract Provisions Federal-Aid Construction contracts.

Proposal note regarding DBE Requirement

This note will be required since ODOT Central Office has determined a DBE requirement is mandated for the project.

"Disadvantaged Business (DBE) Requirement. DBE participation goals (Subcontracts, materials, supplies) have been set on this project for those certified as DBE's in accordance with the TEA - 21 (1998) and 49 CFR, Part 26, and qualified to bid with ODOT under Chapter 5525 of the Ohio Revised Code (O.R.C.)".

At the beginning of the project proposal, following the project identification, the DBE goal designation is written, i.e.

"DBE Goal: 8%."

GENERAL CONDITIONS

1.0 Conformity with Plans and Specifications

- 1.1 All work performed and all materials furnished shall be in reasonably close conformity with the lines, grades, cross sections, dimensions and material requirements, including tolerances, shown on the plans or indicated in the specifications.
- 1.2 In the event the Engineer finds the materials, or the finished product in which the materials are used, not within reasonably close conformity with the plans and specifications but that reasonably acceptable work has been produced, the Engineer will determine if the work shall be accepted and remain in place. In this event, the Engineer will document the basis of acceptance by contract modification which may provide for an appropriate adjustment in the contract price for such work or materials as deemed necessary to conform to the determination based on engineering judgment.
- 1.3 In the event the Engineer finds the materials of the finished product in which the materials are used or the work is performed are not in reasonably close conformity with the plans and specifications and have resulted in an inferior or unsatisfactory product, the work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor.
- 1.4 Upon the order of the Engineer, failure of the contractor to follow the order of the Engineer, pursuant to this section, shall give the Owner the unqualified right to supply the materials for the finished product and perform the labor or cause it to be performed and any and all expense chargeable thereto, directly or indirectly, shall be deducted or billed to the Contractor.

2.0 Schedules, Reports and Records

- 2.1 The Contractor shall submit to the Owner such schedule of quantities and costs, progress schedules, payrolls, reports, estimates, records, and other data where applicable as required by the Contract Documents for the work to be performed.
- 2.2 Within 15 days after the execution of the Contract the Contractor shall submit construction progress schedules showing the order in which it proposes to carry on the work, including dates at which various parts of the work will be started, estimated date of completion for each part, and as applicable:
 - (a) The dates at which special detail drawings will be required.
 - (b) Respective dates for submission of Shop Drawings, the beginning of manufacture, the testing and the installation of materials, supplies, and equipment.

- 2.3 If the Contractor's operations are materially affected by changes in the plan or in the amount of the work or if it has failed to comply with the approved schedule, the Contractor shall submit a revised progress schedule, if requested by the Engineer, which schedule shall show how the Contractor proposes to prosecute the balance of the work. The Contractor shall submit the revised progress schedule within 10 days after the date of the request.
- 2.4 The Contractor shall incorporate into every progress schedule submitted any Contract requirements regarding the order of performance of portions of the work. The Contractor shall use all practicable means to make the progress of the work conform to that shown on the progress schedule which is in effect. Should the prosecution of the work, for any reason, be discontinued, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operations.
- 2.5 The Contractor shall submit 3 copies of a current program schedule with each request for payment. Failure to submit an updated, realistic and accurate progress schedule will be sufficient cause for the Engineer to decline to approve the request for payment. In the event the Engineer determines that the Contractor is behind schedule and may be subject to liquidated damages for delay, the Engineer will deduct from the Contractor's request for payment such sum as the Engineer estimates may be reasonable for such liquidated damages. If the progress is improved and the Engineer estimates that the Contractor is back on schedule, the liquidated damages will be released in the current request for payment.
- 2.6 The Contractor shall also submit a schedule of payments that the Contractor anticipates to be earned during the course of work.
- 2.7 Whenever the work accomplished to date deviates from the latest construction progress schedules, the Contractor shall submit revised construction progress schedules indicating the work accomplished to date and the work to be done. When the work to be done is behind schedule, the Contractor shall include the necessary remedial measures to put the work on schedule.

3.0 Engineer's Authority

- 3.1 The Engineer shall act as the Owner's representative during the construction period and will decide questions which may arise as to quality and acceptability of materials furnished and work performed. The Engineer shall interpret the intent of the Contract Documents in a fair and unbiased manner. The Engineer will make periodic visits to the site and determine if the work is proceeding in accordance with the Contract Documents.
- 3.2 The Engineer will not be responsible for the construction means, controls, techniques, sequences, procedures, or construction safety.

- 3.3 The Engineer has immediate charge of the engineering details of each construction project and is responsible for the administration and satisfactory completion of the project. The Engineer has the authority to reject defective material and to suspend any work that is being improperly performed.
- 3.4 The Engineer will have the authority to suspend the work wholly or in part due to the failure of the Contractor to correct conditions unsafe for the workers or the general public; for failure to carry out provisions of the Contract; for failure to carry out orders; for such periods as is deemed necessary due to unsuitable weather. The suspension of the work for the above reasons does not relieve the Contractor of its responsibility according to Section 11 of these General Conditions.
- 3.5 In the event the Engineer orders the work suspended for unsafe conditions, whether they be unsafe to workers or the public, or unsuitable weather, use of defective material not in conformity with the specifications or because work is being improperly performed, the expense, whether direct or indirect for such suspension shall be borne solely by the Contractor.

4.0 Owner's Inspector

- 4.1 Inspectors employed by the Owner will be authorized to inspect all work done and materials furnished. Such inspection may extend to all or any part of the work and to the preparation, fabrication or manufacture of the materials to be used. The Inspector is not authorized to alter or waive the provisions of the Contract. The Inspector shall have the authority to reject materials which do not meet specification requirements or suspend the portion of the work involved until any question at issue can be referred to and decided by the Engineer. The Inspector is not authorized to issue instructions contrary to the plans and specifications, or to act for the Contractor.

5.0 Inspection and Testing

- 5.1 All materials and equipment used in the construction of the Project shall be subject to inspection and testing in accordance with accepted standards, as required and defined in the Contract Documents.
- 5.2 The Owner shall provide all inspection and testing services not required by the Contract Documents.
- 5.3 The Contractor shall provide all the testing and inspection services required by the Contract Documents.
- 5.4 If the Contract Documents, laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction require any work to specifically be inspected, tested, or approved by someone other than the Contractor, the Contractor will give the Engineer timely notice of readiness. The Contractor will then furnish the Engineer the required certificates of inspection, testing, or approval.

- 5.5 Inspections, tests or approvals by the Engineer or others shall not relieve the Contractor from its obligations to perform the work in accordance with the requirements of the Contract Documents.
- 5.6 The Engineer and its representatives will at all times have access to the work. In addition, authorized representatives and agents of the Owner and any participating federal or state agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records. The Contractor will provide proper facilities for such access and observation of the work and also for any inspection or testing thereof.
- 5.7 If any work is covered, contrary to the written instructions of the Engineer, it must be uncovered for the Engineer's observation and replaced at the Contractor's expense.
- 5.8 If the Engineer considers it necessary or advisable that covered work be inspected or tested by others, the Contractor at the Engineer's request, will uncover, expose or otherwise make available for observation, inspection or testing as the Engineer may require, that portion of the work in question, furnishing all necessary labor, materials, tools, and equipment. If it is found that such work is defective, the Contractor will bear all the expenses of such uncovering, exposure, observation, inspection and testing, and of satisfactory reconstruction. If, however, such work is not found to be defective, the Contractor may be allowed an increase in the Contract Price or an extension of the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction and an appropriate Change Order may be issued.

6.0 Correction of Work

- 6.1 Unacceptable work, whether the result of poor workmanship, nonconformity with Contract Documents, use of defective materials, damage through carelessness or any other cause, found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner by the Contractor. The Contractor shall bear the expense of all work of other Contractors destroyed or damaged by such removal or replacement.
- 6.2 Work done contrary to the instructions of the Engineer, work done beyond the lines shown on the plans, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the Contract. Work so done may be ordered removed or replaced at the Contractor's expense.
- 6.3 If the Contractor does not comply with any reasonable order of the Engineer under the provisions of this section within 10 days after receipt of written notice, the Owner will have authority to cause unacceptable work to be remedied at the expense of the Contractor.

- 6.4 The correction of all items shall be completed in all respects within 30 days after the date of Substantial Completion unless specifically noted otherwise. If punch list items are not completed or corrected by this date, the Owner has the right to perform the work by other means and the cost of the same will be charged against the Contractor originally responsible for the work.
- 6.6 If more than one inspection by the Engineer is required for the purpose of evaluating punch list items to be completed or corrected, such inspection will be performed at the Contractor's expense.

7.0 Surveys, Permits, Regulations, Land and Right-of-Way

- 7.1 The Owner shall establish control points for locating the principal component parts of the work together with a suitable number of bench marks adjacent to the work as shown in the Contract Documents. From the information provided by the Owner, unless otherwise specified in the Contract Documents, the Contractor shall develop and make all detail surveys needed for construction such as slope stakes, better boards, stakes for pile locations and other working points, lines, elevations, and cut sheets.
- 7.2 Permits and licenses of a temporary nature necessary for the prosecution of the work shall be secured and paid for by the Contractor unless otherwise specified. Permits, licenses, and easements for permanent structures or permanent changes in existing facilities shall be secured and paid for by the Owner, unless otherwise specified. The Contractor shall give all notices and comply with all laws, ordinances, rules, and regulations bearing on the conduct of the work as drawn and specified. If the Contractor observes that the Contract Documents are at variance therewith, it shall promptly notify the Engineer in writing and any necessary changes shall be adjusted as provided in these Contract Documents.
- 7.3 Prior to the closure of or working in or on any portion of a street the Contractor shall obtain a permit from the Owner.
- 7.4 Prior to issuance of the Notice to Proceed, the Owner shall obtain all land and rights-of-way necessary for carrying out and for the completion of the work to be performed pursuant to the Contract Documents, unless otherwise mutually agreed.

8.0 Maintenance of the Work Site

- 8.1 The Contractor shall obtain the permission of the Owner before placing or maintaining any temporary facilities on the Owner's property or that of an adjacent landowner.
- 8.2 The Contractor shall provide, at its expense, a suitable spill area away from the Owner's property for the disposal of waste materials and rubbish.

8.3 The Contractor shall, at all times, keep the construction area free from accumulations of waste material and rubbish, and shall, prior to the completion of the work, and at other times as required by the Owner or Engineer, remove from and about the work area and the adjacent premises, all such waste material and rubbish.

8.4 At the completion of the work, the Contractor shall remove from the interior of the building, all minor rubbish that has accumulated, and shall leave the interior broom clean and the grounds around the structure rake clean.

9.0 Laws to be Observed

9.1 The Contractor shall keep fully informed of all federal, Ohio, and City of Worthington laws, ordinances, and regulations and all orders and decrees of authorities having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and its representatives against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order or decree, whether by the Contractor or its agents or employees.

10.0 Federal Aid Provisions

10.1 When the United States government pays all or any portion of the cost of a project, the federal laws and the rules and regulations made pursuant to such laws must be observed by the Contractor and the work shall be subject to the inspection of the appropriate federal agency.

10.2 Such inspection shall in no way make the federal government a party to this Contract and will in no way interfere with the rights of either party hereunder.

11.0 Responsibility for Damage Claims

11.1 The Contractor and Surety shall save harmless the Owner and all of its representatives from all suits, actions, or claims of any character brought on account of any injuries or damages sustained by any person or property in consequence of any neglect in safeguarding the work or through the use of unacceptable materials in the construction of the improvement or on account of any act or omission by the Contractor, or its agents, and it shall pay any judgment obtained or growing out of any claims or suits.

12.0 Contractor's Responsibility for Work

- 12.1 Until final written acceptance of the project by the Owner, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part thereof by the action of the elements, from vandalism or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to acts of God, of the public enemy or governmental authorities.
- 12.2 The Contractor shall not suspend the work unless approved by the Engineer and in such cases under the provisions of Section 20 of these General Conditions, the Contractor shall be responsible for the project and shall take such precautions as may be necessary to prevent damage to the project, provide for adequate drainage and shall erect any necessary temporary structures, signs, or other facilities at its expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established plantings, meetings, and soddings furnished under the Contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

13.0 Supervision by Contractor

- 13.1 The Contractor will supervise and direct the work and will be solely responsible for the means, methods, techniques, safety, sequences, and procedures of construction. The Contractor will employ and maintain on the work a qualified supervisor or superintendent who shall have been designated in writing by the Contractor as the Contractor's representative at the site. The supervisor shall have full authority to act on behalf of the Contractor and all communications given to the supervisor shall be as binding as if given to the Contractor. The supervisor shall be present and on the site at all times as required to perform adequate supervision and coordination of the work.

14.0 Personal Liability of Public Officials

- 14.1 In carrying out any of the provisions of these specifications, or in exercising any power or authority granted to them by or within the scope of the Contract, there shall be no liability upon the Owner or its authorized representatives, either personally or as officials of the Owner, it being understood that in all such matters they act solely as agents and representatives of the Owner.

15.0 Non-Waiver of Legal Rights

15.1 Neither the inspection by the Engineer, nor by any of its duly authorized representatives, nor any order, measurements, or certificates by the Owner, or said representatives, nor any order by the Owner for the payments of money, nor any payment for, nor acceptance of any work by the Owner, nor any extension of time, nor any possession taken by the Owner or its duly authorized representatives, shall operate as a waiver of any provision of this Contract, or of any power herein reserved to the Owner, or any right to damages herein provided; nor shall any waiver of any breach of this Contract be held to be a waiver of any other subsequent breach.

16.0 O.S.H.A. Compliance

16.1 All Contractors shall comply with the provisions of the Occupation, Safety and Health Act of 1970 and subsequent amendments and regulations thereto.

17.0 Changes in the Work

17.1 The Owner may at any time, as the need arises, order changes within the scope of the work without invalidating the Contract. If such changes increase or decrease the amount due under the Contract Documents, or in the time required for performance of the work, an equitable adjustment may be authorized by Change Order.

17.2 The Engineer also may, at any time, by issuing a Field Order, make changes in the details of the work. The Contractor shall proceed with the performance of any changes in the work so ordered by the Engineer unless the Contractor believes that such Field Order entitles it to a change in Contract Price or Time, or both, in which event the Contractor shall give the Engineer written notice thereof within 7 days after the receipt of the ordered change. Thereafter, the Contractor shall document the basis for the change in Contract Price or Time within 30 days. The Contractor shall not execute such changes until the Contractor receives an executed Change Order approved by the Owner.

18.0 Changes in Contract Price

18.1 The Contract Price may be changed only by a Change Order. The value of any work covered by a Change Order or of any claim for increase or decrease in the Contract Price shall be determined by one or more of the following methods in the order of precedence listed below:

- (a) Item prices previously approved.
- (b) An agreed lump sum.

- (c) The actual cost for labor, direct overhead, materials, supplies, equipment, and other services necessary to complete the work. In addition, there shall be added an amount to be agreed upon, but not to exceed 15 percent of the actual cost of the work to cover the cost of general overhead and profit.

18.2 All Contract Price changes shall be approved by the Owner.

19.0 Time for Completion and Liquidated Damages

19.1 The date of beginning and the time for completion of the work are essential conditions of the Contract Documents and Notice to Proceed.

19.2 The Contractor will proceed with the work at much rate of progress to ensure full completion within the Contract Time. It is expressly understood and agreed, by and between the Contractor and the Owner, that the Contract Time for the completion of the work described herein is a reasonable time, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.

19.3 If the Contractor shall fail to complete the work within the Contract Time, or extension of time granted by the Owner, then the Contractor will pay to the Owner the amount of liquidated damages as specified in the Contract for each calendar day that the Contractor shall be in default after the time stipulated in the Contract Documents.

19.4 The Contractor shall not be charged with liquidated damages or any excess cost when the delay in completion of the work is due to the following and the Contractor has promptly given written notice of such delay to the Owner or Engineer:

- (a) To any preference, priority or allocation order duly issued by the Owner.
- (b) To unforeseeable causes beyond the control and without the fault or negligence of the Contractor, including but not restricted to, acts of God, or the public enemy, acts of the Owner, acts of another Contractor in the performance of a contract with the Owner, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and abnormal and unforeseeable weather.

19.5

SCHEDULE OF LIQUIDATED DAMAGES

Original Contract Amount (Total Amount of the Bid):		Amount of Liquidated Damages to be Deducted for Each Calendar Day of Overrun in Time:
<u>For More Than</u>	<u>To and Including</u>	
\$0	\$25,000.	\$ 30.00
\$25,000.	\$50,000.	\$ 50.00
\$50,000.	\$100,000.	\$ 75.00
\$100,000.	\$500,000.	\$100.00
\$500,000.	\$1,000,000.	\$150.00
\$1,000,000.	\$2,000,000.	\$200.00
\$2,000,000.	\$5,000,000.	\$400.00
\$5,000,000.	\$10,000,000.	\$500.00
	OVER \$10,000,000.	\$600.00

19.6 In addition to liquidated damages, the Contractor shall be liable for all expenses incurred by the Owner by reason of the Contractor's default, including judgments awarded to others, reasonable attorneys' fees and all expenses of engineering and inspection after the date set for completion.

19.7 The Owner shall have the right to deduct all or any unpaid balance from liquidated damages or other expenses from any money due or to become due to the Contractor. The amount still owing, if any after such deduction, shall be paid on demand by the Contractor or its Surety. Such payment shall not relieve the Contractor or its Surety from any other obligations under this Contract. It is also expressly agreed that the Contractor shall be liable to the Owner for all damages from the Contractor's failure to complete the work within the time limit fixed.

20.0 Suspension of Work, Termination and Delay

20.1 The Owner may suspend the work or any portion thereof for a period of not more than 90 days or such further time as agreed upon by the Contractor, by written notice to the Contractor and the Engineer fixing the date on which the work shall be resumed. The Contractor will resume the work on the date so fixed. The Contractor may be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension.

- 20.2 If the Contractor should be adjudged a bankrupt, or should make a general assignment for the benefit of its creditors, or if a receiver should be appointed on account of its insolvency, or if it should persistently or repeatedly refuse or should fail, except in cases for which extensions of time are provided and then only for such time, to supply enough properly skilled workers or materials, or if the Contractor should fail to make payments to subcontractors or for material or labor, so as to affect the progress of the work, or persistently be in violation of a substantial requirement of the Contract, or be in violation of Ohio law, the Owner, may, without prejudice to any other right or remedy and after giving the Contractor and its Surety 10 days written notice, terminate the employment of the Contractor and take possession of the premises and of all materials, tools, equipment and other facilities installed on the work and paid for by the Owner and finish the work by whatever method it may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the work is finished. If the unpaid balance of the Contract Price shall exceed the expense of finishing the work, including compensation for additional managerial and administrative services, such excess shall be paid to the Contractor. If such expense shall exceed such unpaid balance, the Contractor shall pay the difference to the Owner. The expense incurred by the Owner as herein provided, and the damage incurred through the Contractor's default, shall be certified by the Engineer.
- 20.3 Where the Contract has been terminated by the Owner, such termination shall not affect or terminate any of the rights of the Owner as against the Contractor or its Surety then existing or which may thereafter accrue because of such default. Any retention or payment of moneys by the Owner due the Contractor under the terms of the Contract, shall not release the Contractor or its Surety from liability for the default.
- 20.4 After 10 days from delivery of a written notice to the Contractor and the Engineer, the Owner may, without cause and without prejudice to any other right or remedy, elect to terminate the Contract. In such case, the Contractor shall be paid for all work executed and any expense sustained plus reasonable profit, unless such termination was due to the act or conduct of the Contractor.
- 20.5 If, through no act or fault of the Contractor, the work is suspended for a period of more than 90 days by the Owner or under an order of a Court or other public authority, or the Engineer fails to act on any request for payment within 30 days after it is submitted, or the Owner fails to pay the Contractor substantially the sum approved by the Engineer or awarded by arbitrators within 30 days of its approval and presentation, then the Contractor may, after 10 days from delivery of a written notice to the Owner and the Engineer, terminate the Contract and recover from the Owner payment for all work executed and all expenses sustained. In addition and in lieu of terminating the Contract, if the Engineer has failed to act on a request for payment or if the Owner has failed to make any payment as aforesaid, the Contractor may upon 10 days written notice to the Owner and the Engineer stop the work until it has been paid all amounts then due, in which event and upon resumption of the work, Change Orders shall be issued for adjusting the Contract Price or extending the Contract Time or both to compensate for the costs and delays attributable to the stoppage of the work.

20.6 If the performance of all or any portion of the work is suspended, delayed, or interrupted as a result of a failure of the Owner or Engineer to act within the time specified in the Contract Documents, or if no time is specified, within a reasonable time, an adjustment in the Contract price or an extension of the Contract Time, or both, may be made by Change Order to compensate the Contractor for the costs and delays necessarily caused by the failure of the Owner or Engineer.

21.0 Scope of Payment

21.1 The Contractor shall receive and accept compensation provided for in the Contract as full payment for furnishing all labor, materials and equipment and for performing all work under the Contract in a complete and acceptable manner and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the prosecution thereof, except as otherwise provided in the Contract Documents.

22.0 Compensation for Altered Quantities

22.1 When the accepted quantities of work vary from the quantities in the bid schedule, the Contractor shall accept as payment in full, so far as Contractor items are concerned, payment at the original contract item prices for the accepted quantities of work done. No allowance except as provided in General Conditions will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor resulting either directly from such alterations or indirectly from unbalanced allocation among the Contract items of overhead expense on the part of the bidder and subsequent loss of expected reimbursements therefor or from any other cause.

22.2 Increased work involving supplemental agreements shall be paid for as stipulated in such agreements. The Contractor shall furnish substantiating data required in the preparation of these agreements.

23.0 Extra Work and Force Account Work

23.1 The Contractor shall perform unforeseen work, for which there is no price included in the Contract, whenever it is deemed necessary or desirable in order to complete fully the work as contemplated. Such work shall be performed in accordance with the specifications and as directed by the Owner.

23.2 Extra work performed in accordance with the requirements and provisions of the Owner will be paid for at the item prices or lump sum stipulated in the order authorizing the work, or the Owner may require the Contractor to do such work on a force account basis to be compensated in the following manner:

- (a) Labor. For all labor and for all foremen in direct charge of the specific operations, the Contractor shall receive the rate of wage and fringe benefits currently in effect at the time the work is performed for each and every hour that said labor and foremen are actually engaged in such work, to which may be added an amount equal to 30 percent of the sum thereof. The term fringe benefits shall be defined as the actual costs paid to, or in behalf of, workers by reason of health and welfare benefits, pension fund benefits or other benefits, when such amounts are required by a collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work. In addition to the above, the Contractor shall receive the actual cost of Social Security Tax, Workers' Compensation and State and federal unemployment insurance. In lieu of itemizing these four items, 15% of the sum of wages and fringe benefits may be added.

The wages of any foreman or timekeeper who is employed partly on force account work and partly in other work, shall be prorated between two classes of work according to the number of workers employed on each class of work as shown by the payrolls.

The Contractor shall receive the actual costs paid for subsistence and travel allowances when such payments are required by a collective bargaining agreement or other employment contract generally applicable to the classes of labor employed on the work. No percentage may be added to these costs.

- (b) Materials. For materials accepted by the Engineer and used, the Contractor shall receive the actual cost of such materials delivered to the work site, including transportation charges paid (exclusive of machinery rentals as hereinafter set forth), to which cost 15% may be added.
- (c) Equipment. For any machinery or special equipment other than small tools which it may be deemed necessary or desirable to use, the Contractor shall be allowed a rental price to be agreed upon in writing before such work is begun, for the time that such equipment is in use on the work. No profit or overhead shall be added to any charges in connection with the use of owned equipment, but 15% of the basic amount payable for rented equipment may be added for overhead and profit. Proper invoices will be required for rental equipment.
- (d) Foreman's Transportation. A flat hourly rate, which includes fuel and lubricants, profit and overhead, and any other costs will be allowed for the foreman's transportation.
- (e) Fuel and Lubricants. For all equipment except the foreman's transportation (for which an all-inclusive flat rate is allowed), 15% of the basic equipment allowance may be added for cost of fuel and lubricants.

- (f) Subcontract Work. For work performed by an approved subcontractor, the Contractor will be allowed an amount to cover administrative costs, equal to 5% of the compensation provided in (a), (b), (c), (d) and (e) but not exceeding \$5,000.00.
 - (g) Compensation. The compensation to the Contractor as above provided in (a), (b), (c), (d), (e) and (f) shall constitute payment in full for extra work done on a force account basis including administration, superintendence, overhead, use of tools and equipment for which no rental is allowed, profit, taxes other than sales tax, premium on insurance, and any other expense incidental to performing the force account work. Sales tax will not be allowed on any item for which tax exemption may be obtained.
 - (h) Statements. Final payment will not be made for work performed on a force account basis until the Contractor has furnished the Engineer with quadruplicate itemized statements of the cost of such force account work detailed as follows:
 - (1) Name, classification, date, daily hours, total hours, rate and extension for each laborer and foreman.
 - (2) Designation, dates, daily hours, total hours, rental rate, and extension for each unit of machinery and equipment.
 - (3) Quantities of materials, prices, and extensions.
 - (4) Transportation of materials.
- 23.3 The Contractor's representative and the Engineer shall compare records daily of the cost of work done as ordered on a force account basis. The Engineer shall certify that these records are correct.
- 23.4 Statements shall be accompanied and supported by proper invoices for all materials used and transportation charges, and rented equipment performing work on force account operations. However, if materials used on the force account work are not specifically purchased for such work but are produced by the Contractor or taken from the Contractor's stock, then in lieu of the invoices the Contractor shall furnish an affidavit certifying that such materials were produced by it or taken from its stock, that the quantity claimed was actually used, and that the price and transportation claimed represent the actual cost to the Contractor. Statements shall be filed not later than the 20th day of the month following that in which the work was actually performed.
- 23.5 The above described force account provisions will also apply to work performed at agreed unit prices and agreed lump sums when the agreed prices are based on analyses of cost of labor, material and equipment.

24.0 Eliminated Items

24.1 Should any items contained in the proposal be found unnecessary for the proper completion of the work, the Owner may, upon written order to the Contractor, eliminate such items from the Contract, and such action shall in no way invalidate the Contract. When a Contractor is notified of the elimination of items, it will be reimbursed for actual work done and all costs incurred, including mobilization of materials prior to the notification.

25.0 Claims for Adjustment and Disputes

25.1 If, in any case, the Contractor deems that additional compensation is due for work or material not clearly covered in the Contract or not ordered by the Owner as extra work, as defined herein, the Contractor shall notify the Owner in writing of its intention to make claim for such additional compensation before the work on which it bases its claim has begun. If such notification is not given, and the Owner is not afforded proper facilities by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor, and the fact that the Owner has kept account of the cost as aforesaid shall not in any way be construed as proving or substantiating the validity of the claim. If the claim, after consideration by the Owner, is found to be just, it will be paid as extra work as provided herein for force account work. Nothing in this subsection shall be construed as establishing any claim contrary to the terms of Sections 17 and 18 of these General Conditions.

26.0 Payments to Contractor

26.1 Partial payments to the Contractor for labor performed shall be made at the rate of 92% of the estimates prepared by the Contractor and approved by the Engineer. All labor performed after the project is 50% completed shall be paid for at the rate of 100% of the estimates submitted by the Contractor and approved by the Engineer 30 days after the date of the approved estimate. In addition to all other payments made to the Contractor on account of work performed, the Owner shall pay the Contractor a sum at the rate of 92% of the invoice costs, for material delivered to the site of the work, provided such materials have been inspected and found to meet the specifications. After the project is fifty percent 50% completed the balance of such invoiced value shall be paid when such material is incorporated into and becomes a part of the work. Payment on approved estimates filed with the Owner shall be made within 30 days. All retained funds after 50% completion shall be deposited in an escrow account with one or more banks or building and loan associations in the state selected by mutual agreement between the Contractor and the Owner at the time the contract is executed. The sums retained by the Owner under this section shall be held by the Owner until completion of the entire work and shall be held by the Owner as guarantee of the performance by the Contractor of all conditions contained in the Contract. The Contractor shall cooperate with the Owner in the opening of the escrow account and shall accompany the Owner's representatives for such purpose to the financial institution of their mutual choice.

- 26.2 The request for payment may also include an allowance for the cost of such major materials and equipment which are suitably stored either at or near the site.
- 26.3 Prior to Substantial Completion, the Owner, with the approval of the Engineer and with the concurrence of the Contractor, may use any completed or substantially completed portions of the work. Such use shall not constitute an acceptance of such portions of the work.
- 26.4 The Owner shall have the right to enter the premises for the purpose of doing work not covered by the Contract Documents. This provision shall not be construed as relieving the Contractor of the sole responsibility for the care and protection of the work, or the restoration of any damaged work except such as may be caused by agents or employees of the Owner.
- 26.5 Upon completion of the work, the Engineer shall issue a letter attached to the final payment request, recommending that the work be accepted by the Owner. The entire balance found to be due the Contractor, including the retained percentages with accumulated interest, but except such sums as may be lawfully retained by the Owner, shall be paid to the Contractor within 30 days of completion and acceptance of the work by the Owner.
- 26.6 The Contractor will indemnify and save the Owner or the Owner's agents less from all claims growing out of the lawful demands of subcontractors, laborers, workers, mechanics, material suppliers, and furnishers of machinery and parts thereof, equipment, tools, and all supplies, incurred in the furtherance of the performance of the work.
- 26.7 The Contractor shall deliver to the Owner either prior to or concurrently with the final estimate the Contractor's Affidavit of Payment listing all suppliers of material and all persons performing labor under and by virtue of this Contract. The Contractor shall also supply, at this time, waivers of mechanics' liens from all material suppliers and all persons performing labor as listed in the Contractor's Affidavit of Payment. The Contractor will be responsible for obtaining its subcontractors the affidavits of payment and waivers of mechanics' liens for the subcontractors' portion of the work. If the Contractor fails to do so the Owner may, after having notified the Contractor, either pay unpaid bills or withhold from the Contractor's unpaid compensation a sum of money deemed reasonably sufficient to pay any and all such lawful claims until satisfactory evidence is furnished that all liabilities have been fully discharged, whereupon payment to the Contractor shall be resumed, in accordance with the terms of the Contract Documents, but in no event shall the provisions of this sentence be construed to impose any obligations upon the Owner to either the Contractor, its Surety, or any third party. In paying any unpaid bills of the Contractor, any payment so made by the Owner shall be considered as a payment made under the Contract Documents by the Owner to the Contractor and the Owner shall not be liable to the Contractor for any such payments made in good faith.

27.0 Acceptance of Final Payments as Release

27.1 The acceptance by the Contractor of final payment shall be and shall operate as a release to the Owner of all claims and all liability to the Contractor, its subcontractors, heirs, executors, administrators, successors and assigns. Any payment, however, final or otherwise, shall not release the Contractor, its subcontractors, heirs, executors, administrators, successors and assigns or its Surety from any obligations under the Contract Documents.

28.0 Contract Security

28.1 The Contractor shall within 10 days after the receipt of the Notice of Award furnish the Owner with a contract bond, if applicable, in penal sums equal to the amount of the Contract Price, conditioned upon the performance by the Contractor of all undertakings, covenants, terms, conditions, and agreements of the Contract Documents, and upon the prompt payments by the Contractor to all persons supplying labor and materials in the prosecution of the work provided by the Contract Documents. Surety companies executing bonds must appear on the Treasury Department's most current list (Circular 570 as amended) and must not exceed the underwriting limitation. Surety companies and their agents or attorneys-in-fact must be authorized to transact business in the state of Ohio as evidenced by the issuance of a Certificate of Compliance by the Ohio Department of Insurance. The expense of the contract bond shall be borne by the Contractor. If at any time a Surety on any such bond is declared bankrupt or loses its right to do business in the state of Ohio or is removed from the list of surety companies accepted on federal bonds (for federally-funded projects), the Contractor shall, within 10 days after the happening of any of the above-described events, substitute an acceptable bond in such form and sum, and signed by such other surety or sureties as may be satisfactory to the Owner. The premiums on such replacement bond shall be paid by the Contractor. No further payments shall be deemed due nor shall be made until the new surety or sureties shall have furnished an acceptable bond to the Owner.

29.0 Assignments

29.1 Neither the Contractor nor the Owner shall sell, transfer, assign or otherwise dispose of the Contract or any portion thereof, or of its right, title or interest therein, or its obligations thereunder, without written consent of the other party.

30.0 Indemnification

- 30.1 The Contractor will indemnify and hold harmless the Owner and the Engineer and their officers, agents, and employees from and against all claims, damages, losses and expenses including attorneys' fees arising out of or resulting from the performance of the work; provided that any such claims, damage, loss or expense is attributable to (i) bodily injury, sickness, disease or death, or (ii) the risk of injury to tangible property, or the injury to or destruction of tangible property, including the loss of use resulting therefrom, and is caused in whole or in part by any negligent or willful act or omission of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether or not it is caused in part by a party indemnified hereunder.
- 30.2 In any and all claims against the Owner or the Engineer, or any of their agents or employees, by any employee of the Contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- 30.3 The obligation of the Contractor under this paragraph shall not extend to the liability of the Engineer, its agents or employees arising out of the preparation or approval of maps, plans, opinions, reports, surveys, change orders, designs or specifications.

31.0 Patented Devices, Materials and Processes

- 31.1 If the Contractor employs any design, device, material, or process covered by letters of patent or copyright, it shall provide for such use by suitable legal agreement with the patentee or owner. The Contractor and the Surety shall indemnify and save harmless the Owner, any affected third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process or any trademark or copy right, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of any infringement, at any time during the prosecution or after the completion of the work.

32.0 Subcontractors

- 32.1 The "Proposed Use of Subcontractors For Specific Portions of the Work" bid form shall be a basis for evaluating Bids. No Bid shall be considered by the Owner unless such bid form is completed and submitted with the Bid. The Owner shall not reject any such listed subcontractor(s) after the Contract award has been made by the Owner.
- 32.2 The Contractor shall not, without the written permission and approval of the Owner, subcontract any additional portions of the work to be performed under this Contract.

- 32.3 In the event that the Contractor desires to subcontract any additional portions of the work, it shall first submit to the Owner a statement showing the nature of the work to be subcontracted and the name and street address of the party or parties to whom it is proposed to subcontract. The decision of the Owner as to its approval shall be final and binding.
- 32.4 The approval of subcontractor(s) by the Owner shall not directly or indirectly release or modify the responsibility of the Contractor for the satisfactory and entire completion of the work under this Contract, and each and every part, and portion thereof.
- 32.5 In case any party or parties to whom any work under this Contract shall have been subcontracted shall disregard the direction of the Engineer or its duly authorized representatives, or shall furnish any unsatisfactory work or shall fail or refuse in any way to conform to any of the conditions of this Contract, then, upon written order of the Engineer the Contractor shall require the party or parties in default to discontinue any work under this Contract.
- 32.6 Any defective work performed by a subcontractor shall be removed and replaced with work which is satisfactory to the Engineer and without cost to the Owner.
- 32.7 Nothing contained in this Contract shall create any contractual relation between any subcontractor and the Owner.
- 32.8 The Contractor shall provide the Owner with a list of names and telephone numbers of the designated employees for each subcontractor to be contacted in case of emergency during non-working hours. A copy of this list shall also be displayed on the job site.

33.0 Guaranty

- 33.1 The Contractor shall guarantee that the work is free from all defects due to faulty materials or workmanship for a period of 1 year from the date of Final Acceptance of the work by the Owner. This guaranty period shall be covered by the Bid Guaranty and Contract Bonds. The Contractor shall, during the life of this guaranty, promptly make all repairs or changes in the work which, in the opinion of the Project Engineer, are necessary as a result of defects due to faulty materials or workmanship. The Owner shall give the Contractor notice of observed defects with reasonable promptness. In the event that the Contractor should fail to make the necessary repairs or changes, the Owner may do so, and the Contractor and its Surety shall be liable for all expenses incurred by the Owner in making said repairs or changes.

34.0 Dispute Resolution and Administrative Claim Process

- 34.1 Whenever an issue is elevated to a dispute, the parties shall exhaust the **City of Worthington**'s Dispute Resolution and Administrative Claim process as set forth below prior to filing an action in any court of competent jurisdiction. The following procedures do not compromise the Contractor's right to seek relief in any court of competent jurisdiction.

All parties to the dispute must adhere to the Dispute Resolution and Administrative Claim process. Do not contact *City of Worthington* personnel who are to be involved in a Step 2 or Step 3 review until a decision has been issued by the previous tier. *City of Worthington* personnel involved in Step 2 or Step 3 reviews will not consider a dispute until the previous tier has properly reviewed the dispute and issued a decision.

Failure to meet any of the timeframes outlined below or to request an extension may terminate further review of the dispute and may serve as a waiver of the Contractor's right to file a claim.

Disputes and claims by subcontractors and suppliers may be pursued by the Contractor on behalf of subcontractors or suppliers. Disputes and claims by subcontractors and suppliers against the *City of Worthington* but not supported by the Contractor will not be reviewed by the *City of Worthington*. Disputes and claims of subcontractors and suppliers against the Contractor will not be reviewed by the *City of Worthington*.

Continue with all work, including that which is in dispute. The *City of Worthington* will continue to pay for work not in dispute.

The *City of Worthington* will not make the adjustments allowed by 104.02.B, 104.02.C, and 104.02.D of the 2019 ODOT Construction and Materials Specifications if the Contractor did not give notice as specified above. This provision does not apply to adjustments provided in Table 104.02-2 of the 2019 ODOT CMS.

Step 1 (On-Site Determination): Contractor should provide immediate oral notification to the *Construction Engineer* upon discovering a circumstance that may require a revision to the Contract Documents or may result in a dispute. Upon notification, the Construction Engineer will attempt to resolve the identified issue as quickly as possible.

If the Construction Engineer has not resolved the identified issue within two (2) working days after receipt of oral notification, provide written notice to the *City Engineer* of any circumstance that may require a revision to the Contract Documents.

The City Engineer will meet with the Contractor's superintendent within two (2) working days of receipt of the Contractor Written Early Notice set forth in 108.02.F of the 2019 ODOT CMS. They will review all pertinent information and contract provisions and negotiate in an effort to reach a resolution according to the Contract Documents.

The City Engineer will issue a written decision of Step 1 within fourteen (14) calendar days of the meeting and receipt of substantiating documentation. If the dispute is not resolved, either abandon or escalate the dispute to Step 2.

Step 2 (*City of Worthington* Dispute Resolution Committee): The *City of Worthington* Dispute Resolution Committee will be responsible for hearing and deciding disputes at the Step 2 level. The committee will consist of *City Engineer* and *City Manager* or designees (other than the project personnel involved).

Within seven (7) calendar days of receipt of the Step 1 decision, submit a written request for a Step 2 meeting to the *City Engineer*. The *City Engineer* will assign the dispute a dispute number. Within fourteen (14) calendar days of receipt of the request for a Step 2 meeting, submit the dispute documentation as follows:

- a. Submit three (3) complete copies of the documentation of the dispute to the *City Engineer*.
- b. Identify the dispute on a cover page by county, project number, Contractor name, subcontractor or supplier (if involved in the dispute), and dispute number.
- c. Clearly identify each item for which additional compensation and/or time is requested.
- d. Provide a detailed narrative of the disputed work or project circumstance at issue. Include the dates of the disputed work and the date of early notice.
- e. Reference the applicable provisions of the plans, specifications, proposal, or other contract documents in dispute. Include copies of the cited provisions in the dispute documentation.
- f. Include the dollar amount of additional compensation and length of contract time extension requested.
- g. Include supporting documents for the requested compensation stated in letter (f) above.
- h. Provide a detailed schedule analysis for any dispute involving additional contract time, actual or constructive acceleration, or delay damages. At a minimum, this schedule analysis must include the Schedule Update immediately preceding the occurrence of the circumstance alleged to have caused delay and must comply with accepted industry practices. Failure to submit the required schedule analysis will result in the denial of that portion of the Contractor's request.
- i. Include copies of relevant correspondence and other pertinent documents.

Within fourteen (14) calendar days of receipt of the Contractor's dispute documentation, the committee will conduct the Step 2 meeting with the Contractor personnel who are authorized to resolve the dispute. The committee will issue a written decision of Step 2 within fourteen (14) calendar days of the meeting. If the dispute is not resolved, either abandon or escalate the dispute to Step 3.

Step 3 Hired Neutral Third Party (Mediation): Submit a written Notice of Intent to File a Claim to the *City Law Director* who will serve as the Dispute Resolution Coordinator (DRC), within fourteen (14) calendar days of receipt of the Step 2 decision.

The dispute becomes a claim when the DRC receives the Notice of Intent to File a Claim.

Submit six (6) complete copies of the claim documentation to the DRC within thirty (30) calendar days of receipt of the Notice of Intent to File a Claim. This timeframe may be extended upon mutual agreement of the parties and with approval of the DRC.

In addition to the documentation submitted at Step 2:

- a. Enhance the narrative to include sufficient description and information to enable understanding by a third party who has no knowledge of the dispute or familiarity with the project.
- b. Certify the claim in writing and under oath using the following certification:

“I, (Name and Title of an Officer of the Contractor) certify that this claim is made in good faith, that all supporting data is accurate and complete to the best of my knowledge and belief, and that the claim amount accurately reflects the contract amendment for which (Contractor Company name) believes the City of Worthington is liable.”

Sign and date this claim certification and have the signature notarized pursuant to the laws of the State of Ohio. The date the DRC receives the certified claim documentation is the date of the City of Worthington’s Receipt of the Certified Claim for the purpose of the calculation of interest as defined in 108.02.G.4 of the 2019 ODOT CMS.

- c. An overview of the project.
- d. Response to each argument set forth by the Contractor.
- e. Any counterclaims, accompanied by supporting documentation, City of Worthington wishes to assert.

The (City Law Director) will then choose Mediation in the manner in which those methods are practiced by the City of Worthington and allowed by law. The DRC will coordinate the agreement of the parties to the Mediation, and the selection of a Mediator. The fees of the Mediator will be shared equally between the City of Worthington and the Contractor. The DRC will obtain a written agreement, signed by both parties, that establishes the Mediation process. The Mediator will have complete control of the claim upon execution of the Mediation agreement.

The Moderator will render a decision within sixty (60) calendar days of the hearing. Within thirty (30) calendar days of receipt of the Moderator’s decision, either accept or reject the decision in writing. In the event the Contractor fails to do so, the (City Manager) may revoke any offers of settlement contained in the decision.

Mediation is the final step of the City of Worthington’s Dispute Resolution Process.

35.0 Taxes

35.1 The Contractor shall withhold all City of Worthington income taxes due or payable under the provisions of Part Seventeen – Title Two of the Codified Ordinances of the City of Worthington, Ohio, for wages, salaries, and commissions paid to its employees, and shall require any of its subcontractors to withhold any such City of Worthington income taxes due under Part Seventeen – Title Two for services performed under this Contract.

36.0 Nondiscrimination in Employment

36.1 In connection with the performance of work under this Contract, the Contractor agrees not to discriminate against any employee or applicant for employment because of race, color, religion, sex, military status, national origin, disability, age, or ancestry, or any other class protected by law. The aforesaid provision shall include but not be limited to the following: employment, upgrading, demotion or transfer, recruitment, or recruitment advertising, layoff or selection for training including apprenticeship. The Contractor shall post notices in conspicuous places setting forth the provisions of this nondiscrimination clause for the benefit of employees or applicants for employment.

37.0 Contract Work Performed by the Owner

37.1 In the event that it becomes necessary for the Owner to perform work of an immediate nature (such as the placement of barricades or replacement of signs or other warning or protective devices) required of the Contractor by this Contract because of a failure or refusal of the Contractor to perform such work, the Contractor shall reimburse the Owner for the actual cost of the labor, materials and equipment necessary to perform such work plus a reasonable overhead amount. The Owner shall be required to notify or attempt to notify the designated representative of the Contractor of the necessity to perform such work. If the Contractor refuses or fails within a reasonable time to perform or cause the performance of such work, the Owner shall perform it and shall be reimbursed by the Contractor for same.

38.0 Certified Payroll

38.1 The Contractor shall post in a prominent and accessible place on the site of the work a legible statement of the schedule of wage rates specified in the Bid Documents to the various classifications of laborers, workers, and mechanics employed. This statement shall remain posted during the life of the Contract.

38.2 The Contractor shall, as soon as it begins performance under the Contract, supply to the prevailing wage coordinator of the Owner a schedule of the dates during the life of the Contract on which it is required to pay wages to employees. The Contractor shall also deliver to the prevailing wage coordinator a certified copy of the payroll within two weeks after the initial pay date, and supplemental reports for each month thereafter. If the life of the Contract is expected to be no more than 4 months from the beginning of performance by the Contractor, such supplemental reports shall be filed each week after the initial report.

The certification of each payroll shall be executed by the Contractor or duly-appointed agent thereof and shall recite that the payroll is correct and complete and that the wage rates shown are not less than those required by Chapter 4115 of the Ohio Revised Code. The Contractor shall be responsible for the submission of payroll copies from all subcontractors.

- 38.3 The Contractor shall make unemployment records available for inspection by authorized representatives of the Owner and will permit employees to be interviewed during working hours by these representatives.
- 38.4 All monthly payrolls shall contain or have attached the following:
- (a) The name, employer identification number, and social security number of each employee.
 - (b) The current address of the employee.
 - (c) The job classification of the employee (same as shown on wage determination or provisional approval).
 - (d) The rate of pay.
 - (e) The hours worked each day and total for each week.
 - (f) The fringe payments and deductions made.
- 38.5 The failure by the Contractor to furnish and submit the above information as part of the required monthly Certified Payroll will be cause for the Owner to withhold the preparation of the monthly estimate. In the event of a violation of the wage rate provisions by the Contractor or any subcontractor, the Owner may, after notice to the Contractor, suspend further payments or proceed to terminate the Contract as provided by other sections of the Contract.
- 38.6 The Contractor shall file with the Owner upon completion of the project and prior to final payment therefor an Affidavit of Final Payment stating that it has fully complied with Sections 4115.03 to 4115.16 of the Ohio Revised Code. The Contractor shall also be responsible for obtaining such Affidavits from all subcontractors and for forwarding the subcontractors' affidavits to the Owner.
- 38.7 This provision shall not apply to public improvements where the federal government or any of its agencies furnishes by loan or grant all or any part of the funds used in constructing such improvements, provided the federal government or any of its agencies prescribes predetermined minimum wages to be paid to mechanics and laborers employed in the construction of such improvements.

38.8 The Department of Industrial Relations shall file with the Secretary of State a list of contractors and subcontractors whom it finds have been prosecuted and convicted for violations of Sections 4115.03 to 4115.16 of the Ohio Revised Code, and each such contractor or subcontractor is prohibited from contracting directly or indirectly with any public authority for the construction of a public improvement or from performing any work on the same as a contractor or subcontractor for a period of two years from the date of conviction. The Owner shall not award a contract for a public improvement to any contractor or subcontractor during the time that its name appears on such list. The filing of the notice of conviction with the Secretary of State shall constitute notice to all public authorities.

39.0 Utilities

39.1 The Contractor shall notify all utility companies, all pipe line owners, or other parties affected by the project, and have all necessary adjustments of the public or private utility fixtures, pipe lines, and other appurtenances within or adjacent to the limits of construction made as soon as practicable.

39.2 Water lines, gas lines, wire lines, service connections, water and gas meter boxes, water and gas valve boxes, light standards, cableways, signals, and all other utility appurtenances within the limits of the proposed construction which are to be relocated or adjusted are to be moved by the utility company or its authorized designee, except as otherwise provided for in the special provisions or as noted on the plans.

39.3 It is understood and agreed that the Contractor fully considered in its bid the financial impact or otherwise of all known permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed to the Contractor for any delays, inconvenience or damage sustained by it due to any interference from known utility appurtenances or the operation of moving said utility appurtenances.

ODOT LPA CONTRACT PROVISIONS

ODOT's LPA Template (ODOT Spec Book and LPA Spec Book) Required Contract Provisions.

1. ODOT'S 2023 CONSTRUCTION AND MATERIAL SPECIFICATIONS (C&MS) AND ITS SUPPLEMENTS

ODOT's Construction and Material Specifications (C&MS) and its supplements are hereby incorporated by reference, in their entirety, as if rewritten herein. **The incorporation of this document by reference does not interfere with the order of precedence set forth in Section 105.04 of the C&MS Manual.**

In accordance with the Locally Administrated Transportation Projects Manual of Procedures (LATPM), when bidding this project, the contractor should replace the terms "the department", "the engineer", "the DCE" and "the DCA" with the term "the Local Public Agency (LPA)." Furthermore, nothing in this document is intended to alter the LPA's adherence to Ohio Revised Code, local ordinance or other applicable requirements which are properly established.

2. PN 133 – 10/20/2023 – Products Made in the United States

The requirements of this note replace the domestic material requirements in 106.09 of the Construction & Material Specifications.

This note is automatically inserted into all projects that have federal funding in the construction phase or any prior phase. If there was federal participation in environmental studies, right of way acquisition, preliminary engineering or other phase defined in the environmental document, this note should be included in the proposal.

Furnish products that are made in the United States according to the applicable provisions of the Infrastructure Investment and Jobs Act, Pub. L. No. 117-58, which includes the Build America, Buy America Act Pub. L. 117-58, §§ 70901-52.

A. Federal Requirements. All steel or iron products incorporated permanently into the Work must be made of steel or iron produced in the United States and all subsequent manufacturing must be performed in the United States. Manufacturing is any process that modifies the chemical content; physical shape or size; or final finish of a product. Manufacturing begins with the initial melting and mixing and continues through the bending and coating stages. If a domestic product is taken out of the United States for any process, it becomes a foreign source material.

All manufactured products used in the project are not required to be produced in the United States.

All construction materials must be manufactured in the United States—this means that all manufacturing processes for the construction material occurred in the United States.

"Construction materials" includes an article, material, or supply—other than an item of primarily iron or steel; a manufactured product; cement and cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives—that is or consists primarily of:

- Non-ferrous metals;
- Plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables);
- Glass (including optic glass);
- Fiber optic cable (including drop cable);
- Optical fiber;
- Lumber;
- Engineered wood; and
- Drywall.

To provide clarity to item, product, and material manufacturers and processors, we note that items that consist of two or more of the listed materials that have been combined together through a manufacturing process, and items that include at least one of the listed materials combined with a material that is not listed through a manufacturing process, should be treated as manufactured products, rather than as construction materials. For example, a plastic framed sliding window should be treated as a manufactured product while plate glass should be treated as a construction material.

B. Exceptions. The Director may grant specific written permission to use non-domestic steel or iron products in any type of construction in accordance with 23 CFR 635.410(b)(4). The Director may grant such exceptions under the following condition:

- The cost of products to be used does not exceed 0.1 percent of the total Contract cost, or \$2,500, whichever is greater. The cost is the value of the product as delivered to the project.

The Director may grant specific written permission to use non-domestic construction materials and manufactured products in any type of construction in accordance with 2 CFR Part 184. The Director may grant such exceptions under the following conditions:

- The total value of the non-compliant products is no more than the lesser of \$1,000,000 or 5% of total applicable costs for the project; or
 - applicable costs are defined as the cost of materials (including the cost of any manufactured products) used in the project that are subject to a domestic preference requirement
 - the actual cost of the materials, not the anticipated cost of those materials.
- The total amount of the Federal financial applied to the project, through awards or subawards, is below \$500,000;

The Buy America preference only applies to articles, materials, and supplies that are consumed in, incorporated into, or affixed to an infrastructure project. As such, it does not apply to tools, equipment, and supplies, such as temporary scaffolding, brought to the construction site and removed at or before the completion of the infrastructure project. Nor does a Buy America preference apply to equipment and furnishings, such as movable chairs, desks, and portable computer equipment, that are used at or within the finished infrastructure project, but are not an integral part of the structure or permanently affixed to the infrastructure project.

C. Proof of Domestic Origin. Furnish certification to the Engineer showing the domestic origin of all products covered by this section before they are incorporated into the Work. The Daily Source Report form itself is not acceptable certification of domestic origin. Non-domestic product(s) incorporated into the Work does not relieve the Contractor of any responsibility to correct the Work up to and including removal and replacement of the non-domestic product(s). Products without a traceable domestic origin will be treated as a non-domestic product.

3. CERTIFICATION AGAINST DEBARMENT AND SUSPENSION

The bidder hereby certifies by signing this proposal that, except as noted below, under penalty of perjury and under other such penalties as the laws of this state and the United States of America provide, that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds is **not** currently under suspension, debarment, voluntary exclusion or determination of ineligibility by any federal agency; that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator, project director, manager, auditor, or any position involving the administration of federal funds has **not** been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three (3) years; that the company or any person associated therewith in the capacity of owner, partner, director, manager, auditor, or any position involving the administration of federal funds does **not** have a proposed debarment pending; that the company or any person associated therewith in the capacity of owner, partner, director, officer, principal investigator has **not** been indicted, convicted, or had a civil judgment rendered against the company or themselves by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

If there are exceptions to any of the above clauses, please include a statement with the bid package detailing these exceptions.

Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. For any exception noted, indicate below to whom it applies, initiating agency and dates of action. Providing false information may result in criminal prosecution or administrative sanctions. Execution of this proposal on the signature portion thereof shall also constitute signature of this certification as permitted by Title 28 United States Code, Section 1746.

4. PREQUALIFICATION

Only prequalified contractors are eligible to submit bids for this project. Prequalification status must be in force **at the time of bid, at the time of award, and through the life of the construction contract.** For work types that ODOT does not prequalify, the LPA must still select a qualified contractor. Subcontractors are not subject to the prequalification requirement. The “prime” contractor must perform no less than 30 percent of the total original contract price.

5. PN 033 - 4/18/2008- AS PER PLAN DESIGNATION

(Not required by FHWA, but strongly suggested if As Per Plan is used by the LPA)

The “As Per Plan” designation is sometimes added to item descriptions in the proposal to assist contractors with easily identifying standard items that have been altered by plan notes.

The “As Per Plan” designation has proven to be a very useful tool for the contractors. However, its use was never intended to relieve the contractors of their responsibility to read, bid, and construct all items in accordance with all governing plan notes. Therefore, the absence of an “As Per Plan” designation on some item descriptions in the proposal for which there are clear and controlling plan notes does not relieve the contractors of the responsibility to read, bid, and construct those particular items in accordance with the governing plan notes.

Be advised that the item descriptions in the bidding proposal must be read or interpreted with the governing plan notes and the Construction and Material Specification Manual. A claim based upon an “order of precedence” basis will be denied. In the event that a conflict, either real or perceived, exists between the item description and the governing plan note, the contractors are to request clarification through the pre-bid process.

6. FEDERALLY REQUIRED EQUAL EMPLOYMENT OPPORTUNITY (EEO) CERTIFICATION FORM

The bidder hereby certifies that he or she **has**, **has not**, participated in a previous contract or subcontract subject to the equal opportunity clause, as required by Executive Orders 10925, 11114, or 11246, and that he or she **has**, **has not**, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements. **The bidder must circle the appropriate “has” or “has not” above.**

7. PN 017 - 10/15/2004 - FEDERALLY REQUIRED EEO CERTIFICATION CLAUSE

The Federally Required EEO Certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)) and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of \$10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to the Executive Orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such contractor submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U.S. Department of Labor.

8. PN 026 - 10/15/2004 - CERTIFICATION OF NON-SEGREGATED FACILITIES

- A. Certification of Non-segregated Facilities, as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities (for a Federal-aid highway construction contract exceeding \$10,000 which is not exempt from the provisions of the Equal Opportunity clause).
- B. Bidders are cautioned as follows: By signing this bid, the bidder has agreed to the provisions of the "Certification of Non-segregated Facilities" in this proposal. This certification provides that the bidder does not maintain or provide for his or her employees' facilities which are segregated on a basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the bidder will not maintain such segregated facilities.
- C. Bidders receiving Federal-aid highway construction contract awards exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause, will be required to provide for the forwarding of the following notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

"Notice to Prospective Subcontractors and Material Suppliers of Requirement for Certification of Non-segregated Facilities" -

- A. A Certification of Non-segregated Facilities as required by the May 9, 1967, Order of the Secretary of Labor (32 F.R. 7439, May 19, 1967) on Elimination of Segregated Facilities, which is included in the proposal, or attached hereto, must be submitted by each subcontractor and material supplier prior to the award of the subcontract or consummation of a material supply agreement if such subcontract or agreement exceeds \$10,000 and is not exempt from the provisions of the Equal Opportunity clause.
- B. Subcontractors and material suppliers are cautioned as follows: By signing the subcontract or entering into a material supply agreement, the subcontractor or material supplier will be deemed to have signed and agreed to the provisions of the "Certification of Non-segregated Facilities" in the subcontract or material supply agreement. This certification provides that the subcontractor or material supplier does not maintain or provide for his or her employees facilities which are segregated on the basis of race, creed, color, or national origin, whether such facilities are segregated by directive or on a de facto basis. The certification also provides that the subcontractor or material supplier will not maintain such segregated facilities.
- C. Subcontractors or material suppliers receiving subcontract awards or material supply agreements exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective subcontractors for construction contracts and material suppliers where the subcontracts or material supply agreements exceed \$10,000 and are not exempt from the provisions of the Equal Opportunity clause.

9. PN 003 - 10/15/2004 - TITLE VI RELATED STATUTES NON-DISCRIMINATION STATEMENT

The LPA, under Title VI of the Civil Rights Act and related statutes, ensures that no person within the LPA shall on the grounds of race, color, national origin, sex, disability, or age be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

10. CERTIFICATION OF COMPLIANCE WITH AFFIRMATIVE ACTION PROGRAMS

In accordance with Ohio Administrative Code §9.47, before any Contract is awarded, the LPA will require the Bidder to furnish a valid Certificate of Compliance with Affirmative Action Programs, issued by the State EEO Coordinator dated prior to the date fixed for the opening of bids.

11. PN 020- 10/21/2022- NOTICE OF REQUIREMENT OF AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY AND WORKFORCE DIVERSITY REQUIREMENTS ON ALL FEDERALLY FUNDED PROJECTS (CLOSE MONITORING AND ENFORCEMENT CURRENTLY APPLIES TO PROJECT AMOUNT GREATER THAN \$10M ONLY).¹ PLEASE NOTE THAT ODOT MAY REQUEST INFORMATION AT ANY TIME FOR PROJECTS UNDER \$10M, AS NEEDED.

The bidder’s attention is called to the affirmative action obligations required by the specifications set forth in 23 CFR Part 230, 41 CFR Part 60, Executive Order 11246, Section 503, and the affirmative action provisions of Vietnam Era Veterans' Readjustment Assistance Act (VEVRAA) of 1974.

WORKFORCE UTILITATION GOALS

Utilization goals applicable to the project, expressed in percentages, for minority and female participation for each construction craft can be found on ODOT’s website at **Contracts | Ohio Department of Transportation.** These goals are based on 2020 census data and represent the area, per craft, minority, and female availability pool.

- **Census Availability Percentages for minority and female workers** by craft per county (applicable to project):
<http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Construction/CensusForAllCounties.xlsx>
<http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/Construction/CensusForAllCounties.pdf>
- **Statewide utilization obligations/ goals for minority workers** by county (applicable to each project).
- **Statewide utilization obligation/ goal for female workers is 6.9%** and applies the same for each county.

Source: US Department of Labor’s, Office of Federal Contract Compliance Programs, Technical Assistance Guide for Construction Contractors (pp. 126 – 127)

Construction Contractors Technical Assistance Guide (dol.gov)

Ohio 064 Youngstown-Warren, OH:

SMSA (Standard Metropolitan Statistical Area) Counties:

9320 Youngstown - Warren, OH	9.4
OH Mahoning; OH Trumbull.	
Non-SMSA Counties	6.7
OH Columbiana; PA Lawrence; PA Mercer.	

065 Cleveland, OH:

SMSA Counties:

0080 Akron, OH	7.8
OH Portage; OH Summit.	
1320 Canton, OH	6.1
OH Carroll; OH Stark.	
1680 Cleveland, OH	16.1
OH Cuyahoga; OH Geauga; OH Lake; OH Medina.	
4440 Lorain-Elyria, OH	9.3
OH Lorain.	
4800 Mansfield, OH	6.3
OH Richland.	
Non-SMSA Counties:	11.3

¹ All Federally Funded projects greater than \$10K are required to meet the workforce requirements; however close monitoring and enforcement of those over \$10M are defined by ODOT regularly tracking hiring progress with quarterly workforce utilization reports provided to district and contractor staff at progress meetings along with submission of Good Faith Efforts, at the end of a project. GFEs are only requested in the event of a shortfall in female and minority workforce percentages.

OH Ashland; OH Ashtabula; OH Coshocton; OH Crawford; OH Erie;
OH Holmes; OH Huron; OH Tuscarawas; OH Wayne.

066 Columbus, OH:

SMSA Counties:	
1840 Columbus, OH _____	10.6
OH Delaware; OH Fairfield; Franklin; OH Madison; OH Pickaway.	
Non-SMSA Counties _____	7.3
OH Athens; OH Fayette; OH Guernsey; OH Hocking; OH Jackson; OH Knox; OH Licking; OH Marion; OH Meigs; OH Morgan; OH Morrow; OH Muskingum; OH Noble; OH Perry; OH Pike; OH Ross; OH Scioto; OH Union; OH Vinton.	

067 Cincinnati, OH:

SMSA Counties:	
1640 Cincinnati, OH-KY-IN _____	11.0
IN Dearborn; KY Boone; KY Campbell; KY Kenton; OH Clermont; OH Hamilton; OH Warren.	
3200 Hamilton - Middletown, OH _____	5.0
OH Butler.	
Non-SMSA Counties _____	9.2
IN Franklin; IN Ohio; IN Ripley; IN Switzerland; KY Bracken; KY Carroll; KY Fleming; KY Gallatin; KY Grant; KY Lewis; KY Mason; KY Owen; KY Pendleton; KY Robertson; OH Adams; OH Brown; OH Clinton; OH Highland.	

068 Dayton, OH:

SMSA Counties:	
2000 Dayton, OH _____	11.5
OH Greene; ON Miami; OH Montgomery; OH Preble.	
7960 Springfield, OH _____	7.8
OH Champaign; OH Clark.	
Non-SMSA Counties _____	9.9
OH Darke; OH Logan; ON Shelby.	

069 Lima, OH:

SMSA Counties:	
4320 Lima, OH _____	4.4
OH Allen; OH Auglaize; OH Putnam; OH Van Wert.	
Non-SMSA Counties _____	3.5
OH Hardin; OH Mercer.	

070 Toledo, OH:

SMSA Counties:	
8400 Toledo, OH-MI _____	8.8
MI Monroe; OH Fulton; OH Lucas; OH Ottawa; OH Wood.	
Non-SMSA Counties _____	7.3
MI Lenawee; OH Hancock; OH Henry; OH Sandusky; OH Seneca; OH Wyandot.	

The New Hire Definition for the purposes of on-the-job training and workforce utilization is as follows:

An individual who has a break in service (not on an employer's payroll) for a period of twelve (12) months or longer and the person affected is not a salaried employee but belongs to a union craft. Individuals compensated for training or incidental work which does not cause a break in unemployment compensation, i.e., paid by voucher check or petty cash, are considered new hires if the individual's break in service is twelve (12) months or longer.

The time frame for a new hire shall be associated with the first project worked for that contractor regardless of whether it is public or private. When reporting a newly hired employee, the contractor shall identify that employee as a new hire on that specific project only. Subsequent work, barring a break in service of twelve (12) months or more, would not qualify the employee as a new hire for that contractor.

Compliance: The contractor's compliance shall be based on the implementation of affirmative action obligations required by the specifications set forth in 23 CFR Part 230, and its good faith efforts to meet these obligations. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the contractor shall make a good faith effort to employ minorities and females on each of its projects. The transfer of minority or female employees or trainees from contractor to contractor or from project to project for the sole purpose of meeting the affirmative action obligations shall be a violation of the contract and regulations in 23 CFR Part 230. The good faith efforts put forth by the contractor will be measured against the total work hours performed.

Under FHWA, ODOT is the authority tasked with ensuring that the contractor adheres to the aforementioned regulations. In addition to complying with the Required Contract Provisions, the contractor shall provide immediate written notification to ODOT when referral practices of the union(s) with which the contractor has a collective bargaining agreement impede the company's efforts to meet its equal opportunity obligations.

The U.S. Department of Labor, Office of Federal Contract Compliance Programs (OFCCP), administers and enforces equal employment opportunity laws that apply to Federal government contractors and subcontractors supplying goods and services, including construction, to the Federal Government under 41 CFR Part 60, Executive Order 11246, Section 503, and the affirmative action provisions of VEVRAA. The OFCCP monitors compliance with these laws primarily through compliance evaluations, during which a compliance officer examines the contractor's affirmative action efforts and employment practices. Under Executive Order 11246, the OFCCP may perform contract compliance reviews on contractors involved with federally funded ODOT projects.

Requirements for affirmative action obligations governing OFCCP contract compliance reviews are those listed in the Federal Register for the Economic Area.

Federal Register :: Government Contractors, Affirmative Action Requirements (2000)

Federal Register :: RIN 1250-AA10 (2020 updates)

ADDITIONAL REQUIREMENTS FOR ODOT PROJECTS WITH STATE FUNDING

The Ohio Department of Development (ODOD), Minority Business Division, is responsible for ensuring state contractors implement and adhere to the State of Ohio's affirmative action program pursuant to Ohio Administrative Code (OAC) 123: Chapters 123:2-3-01 through 123:2-3-07. Specifically, this unit's responsibilities includes the issuance of certificates of compliance under ORC 9.47 and 153.08, conducting project site visits, and compliance reviews (desk audits) to ensure contractors utilize minorities and women in the construction trades, and maintain a working environment free of discrimination, harassment, and intimidation. The ODOD may perform contract compliance reviews on contractors involved with state or state assisted projects. Requirements for affirmative action obligations governing ODOD contract compliance reviews are those listed in OAC 123:2-3-02, for the Metropolitan Statistical Area in which a project is located.

All prime and subcontractors regardless on the number of employees or the state contract amount are required to submit monthly utilization reports (Input Form 29) to the Ohio Department of Development covering the contractor's total workforce within the state of Ohio (private sector and public sector projects). The reports must be filed electronically by the 10th of each month, beginning with the contract award and continuing until the contractor or subcontractor completes performance of the contract, as set forth in OAC 123:2-9-01.

I-29 monthly reports must be submitted via the Ohio Business Gateway portal: <https://ohio.gov/wps/portal/gov/site/business/resources/ohio-business-gateway> / Ohio Business Gateway | Ohio.gov | Official Website of the State of Ohio

Steps to Submit the I-29 Form:

1. Visit Ohio Business Gateway
2. Log in using username and password (OH|ID)
3. Ensure "Equal Opportunity Division" is among available service areas
4. Ensure "Input 29" is among available transactions
5. Select "Input 29" and complete the form
6. Click "File" button on the Summary page to see a confirmation page
7. Submit supporting documentation (if required) to: das-eod.bccu@das.ohio.gov

I-29 reports are used by ODOT to create monthly utilization work hour reports to monitor adherence to on-the-job training requirements and workforce diversity requirements. Prime contractors and subcontractors shall provide monthly utilization work hour reports for the contractor's or subcontractor's total workforce within the state of Ohio to the compliance officer of the contracting agency (ODOT). A contractor's or subcontractor's failure to submit a monthly utilization work hour report shall be a basis for invoking any of the sanctions set forth in rule 123:2-7-01 of the Ohio Administrative Code.

12. PN 059 - 10/15/2004 - WAGE DETERMINATION APPEALS PROCESS

1. Has there been an initial decision in the matter? This can be:
 - * An existing published wage determination
 - * A survey underlying a wage determination
 - * A Wage and Hour Division letter setting forth a position on a wage determination matter
 - * A conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response for this initial contact is not satisfactory, the process described in 2.) and 3.) should be followed.

Regarding any other matter not yet ready for the formal process described within this section, initial contact should be made with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determination
Wage and Hour Division
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D. C. 20210

2. If the answer to the question in 1.) is yes, an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (see 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U. S. Department of Labor
200 Constitution Avenue, N.W.
Washington, D. C. 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requester considers relevant to the issue.

3. If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U. S. Department of Labor
200 Constitution Avenue, N. W.
Washington, D. C. 20210

4. All decisions by the Administrative Review Board are final.

13. PN 061 –10/22/2012- WAGE SCALE ON ALL FEDERAL-AID PROJECTS

The wage rates for this project were determined by the Secretary of Labor in accordance with Federal-Aid requirements. The LPA must formally incorporate them into the contract documents.

Contractors shall use only the classifications and wage rates set forth in the United States Department of Labor (USDOL) wage decision found at the website noted below on payrolls submitted to the ODOT District Office. Additionally, please note that the wage modification in effect at the time of the project sale date shall be used by all contractors.

This USDOL wage decision may be viewed by accessing the United States Department of Labor (USDOL) website at: <https://sam.gov/content/wage-determinations>

This contract requires the payment of the total of the basic hourly rates plus the fringe benefits payments for each classification in accordance with the following regulations which by reference are made part of this contract:

- 1) The U.S. Department of Labor Regulations, Title 29, Subtitle A, Part 5, Sections 5.5, 5.31, and 5.32, most recent revision at contract execution.
- 2) Form FHWA-1273 (most recent revision at contract execution) Part IV. Payment of Predetermined Minimum Wage and Part V. Statements and Payrolls. (Form FHWA-1273 shall be physically incorporated in all contracts, subcontracts, and lower-tier subcontracts.)

The failure to pay prevailing wages to all laborers and mechanics employed on this project shall be considered a breach of contract. Such a failure may result in the termination of the contract and debarment.

The contractor and all subcontractors shall pay all wages and fringe benefits by company funds transfer or legal tender. All payroll records and company funds transfer transactions or legal tender transactions shall be maintained for at least three (3) years after final acceptance as defined in Section 109.12 of the ODOT C&MS. The contractor's and all subcontractor's payroll records and canceled pay checks shall be made available for inspection by the Department and the U.S. Department of Labor, upon request, anytime during the life of the contract, and for three (3) years thereafter by the U.S. Department of Labor. Additionally, the contractor and all subcontractors shall permit such representatives to interview any employees during working hours while the employee is on the job.

The wage and fringe rates determined for this project shall be posted by the contractor in a prominent and accessible place on the project, field office, or equipment yard where they can be easily read by the workers.

The contractor and all subcontractors shall submit to the District Construction Office certified payrolls each week beginning three (3) weeks after the start of work. These payrolls shall be on a Form WH-347 or equivalent and shall show the following:

1. Employee name, address, classification, and hours worked.
2. The basic hourly and overtime rate paid, total pay, and the manner in which fringe benefit payments have been irrevocably made.
3. The project number and pay week dates.

4. Original signature of a company officer on the certification statement.

Additionally, a copy of the "Apprentice Certification" obtained from the Ohio State Apprenticeship Council must accompany all certified payrolls submitted for all apprentices working on this project.

Please be aware it is ultimately the responsibility of the contractor to ensure all laws relating to prevailing wages in the USDOL Regulations, Title 29, parts 1 and 5, are strictly adhered to by all subcontractors on the project.

If the contractor or any subcontractor fails to comply with any of the provisions contained in this proposal note, the Department may terminate the contract, debar the contractor or subcontractor, and/or withhold or suspend pay estimates after written notice and a reasonable opportunity to comply has been provided.

The applicable wage and fringe rates for this project are to be incorporated in their entirety as an attachment to the executed contract.

14. LIMITATION ON USE OF CONTRACT FUNDS FOR LOBBYING

A. The prospective bidder certifies, by signing and submitting this bid proposal, to the best of his or her knowledge and belief that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a member of Congress, an officer or employee of Congress, or an employee of a member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying" in accordance with its instructions.

B. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. This certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

C. The prospective bidder also agrees by submitting his or her bid proposal that he or she shall require the language of this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such subcontractors shall certify and disclose accordingly.

15. PN 045 - 10/15/2004 - NON -COLLUSION AFFIDAVIT

In accordance with Title 23 USC, Section 112 and ORC, Chapter 1331 et. seq: and Sections 2921.11 and 2921.13, the bidder hereby states, under penalty of perjury and under other such penalties as the law provides, that he/she or his/her agents or employees have not entered, either directly or indirectly, into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this proposal. Execution of this proposal on the signature portion thereof shall also constitute signature of this Non-Collusion Affidavit as permitted by title 28 USC, Section 1746.

REPORTING BID RIGGING

To report bid rigging activities call:

1-800-424-9071

The U.S. Department of Transportation (USDOT) operates the above toll-free "hotline" Monday through Friday, 8:00 a.m. to 5:00 p.m. eastern time. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report such activities.

The "hotline" is part of the USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the USDOT Inspector General. All information will be treated confidentially, and caller anonymity will be respected.

16. PN 014 - 10/15/2004 - DRUG-FREE WORKPLACE

The prime contractor agrees to comply with all applicable state and federal laws regarding drug-free workplace. The prime contractor shall make a good faith effort to ensure that all its employees while working on this project will not purchase, transfer, use, or possess illegal drugs or alcohol or abuse prescription drugs in any way.

The prime contractor shall also require this contractual obligation be placed in all subcontractor and materialman contracts it enters into and further requires all subcontractors and materialmen place the same contractual obligations in each of their lower-tier contracts.

17. PN 034 - 05/25/2011 – DRUG FREE SAFETY PROGRAM

During the life of this project, the contractor and all its subcontractors who provide labor on the project site must be enrolled in and remain in good standing in the Ohio Bureau of Worker's Compensation (OBWC) Drug-Free Safety Program (DFSP) or a comparable program approved by the OBWC.

In addition to being enrolled in and in good standing in an OBWC-approved DFSP or a comparable Drug Free Workplace Program (DFWP) approved by the OBWC, the LPA requires each contractor and subcontractor that provides labor to subject its employees who perform labor on the project site to random drug testing of five (5) percent of its employees. The random drug testing percentage must also include the on-site supervisors of the contractors and subcontractors. Upon request, the contractor and subcontractor shall provide evidence of required testing to the LPA.

Each subcontractor shall require all lower-tier subcontractors who provide labor on the project site with whom the subcontractor is in contract for the work to be enrolled in and be in good standing in the OBWC DFSP or an OBWC-approved DFWP prior to a lower-tier subcontractor providing labor at the site.

The LPA will declare a bid non-responsive and ineligible for award if the contractor is not enrolled in and in good standing in the OBWC's DFSP Discount Program or a similar program approved by the OBWC within eight (8) days of the bid opening. Furthermore, the LPA will deny all requests to sublet when the subcontractor does not comply with the provisions of this proposal note.

Failure of the contractor to require a subcontractor to be enrolled in and be in good standing in the OBWC DFSP or an OBWC-approved DFWP prior to the time the subcontractor provides labor at the site shall result in the contractor being found in breach of the contract and that breach shall be used in the responsibility analysis of that contractor or the subcontractor who was not enrolled in a program for future contracts with the State for five (5) years after the date of the breach.

18. OHIO WORKERS' COMPENSATION COVERAGE

The contractor must secure and maintain valid Ohio workers' compensation coverage until the project has been finally accepted by ODOT. A certificate of coverage evidencing valid workers' compensation coverage must be submitted to the LPA before the contract will be executed by the LPA.

The contractor must immediately notify the LPA in writing if it or any subcontractor fails or refuses to renew their workers' compensation coverage. Furthermore, the contractor must notify the LPA in writing if its or any of its subcontractor's workers' compensation policies are canceled, terminated, or lapse.

The failure to maintain valid workers' compensation coverage shall be considered a breach of contract which may result in the contractor or subcontractor being removed from the project, withholding of pay estimates, and/or termination of the contract.

19. PN 038 - 10/15/2004 - UNRESOLVED FINDING FOR RECOVERY

The contractor affirmatively represents to the LPA that it is not subject to a finding for recovery under ORC §9.24, or that it has taken the appropriate remedial steps required under §9.24 or otherwise qualifies under that section. The contractor agrees that if this representation is deemed to be false, the contract shall be void ab initio as between the parties to this contract, and any funds paid by the state hereunder shall be immediately repaid to the LPA, or an action for recovery may be immediately commenced by the LPA and/or for recovery of said funds.

20. PN 039 - 10/15/2004 - ASSIGNMENT OF ANTITRUST CLAIMS IN STATE CONTRACT LANGUAGE

The contractor should recognize that in actual economic practice, overcharges resulting from antitrust violations are usually borne by ODOT and/or the LPA. As consideration for the Award of the Contract and intent to be legally bound, the contractor acting herein by and through the person signing this contract on behalf of the contractor as a duly authorized agent, hereby assigns, sells, conveys, and transfers to ODOT and/or the LPA any and all right, title, and interest to any and all claims and causes of action the contractor now has or hereafter requires under state or federal antitrust laws provided the claims or causes of action related to the goods or services are the subject to the contract. In addition, the contractor warrants and represents that it will require all of its subcontractors and first-tier suppliers to assign all federal and state antitrust claims and causes of action to ODOT and/or the LPA. The provisions of this article shall become effective at the time the LPA executes this contract without further acknowledgment by any of the parties.

All contracting entities shall assign their rights and responsibilities to ODOT and/or the LPA for all antitrust claims and causes of action regarding subcontractors.

21. PN 024 – 04/21/2006 – US ARMY CORPS OF ENGINEERS AND OHIO ENVIRONMENTAL PROTECTION AGENCY PERMITS

The above referenced permits are incorporated and made a part of this contract as special provisions incorporated herein. Therefore, in the event the contractor or its agents refuse or fail to adhere to the requirements of the US Army Corps of Engineers 404 Permit and/or the Ohio Environmental Protection Agency's 401 Water Quality Certification and an assessment or fine is made or levied against ODOT and/or the LPA, the contractor shall reimburse the Department within thirty (30) calendar days of the notice of assessment or fine, or the Department may withhold the amount of the fine from the contractor's next pay estimate. All money collected or withheld from the contractor shall be delivered to the permitting agencies issuing the assessment or fine.

These fines are not to be construed as a penalty but are liquidated damages to recover costs assessed against the Department due to the contractor's refusal or failure to comply with the permits.

22. PN 007 – 1/31/2021- DBE TRUCKING

Title 49 CFR Section 26.55(d)(4)(5)(6) governs trucking operations.

The Disadvantaged Business Enterprise (DBE) trucking firm must be able to quote and negotiate its own prices. The DBE trucking firm must also provide a quote for each project on which the firm is to be utilized toward the project DBE goal.

The DBE will be responsible for the management and supervision of their trucking operation on each contract. A DBE is not performing a Commercially Useful Function (CUF) if the contract exists for the purpose of creating the appearance of DBE participation.

The DBE must own and operate at least one fully licensed, insured, and operational truck used on the contract.

The DBE receives credit for the total value of the transportation services the DBE provides on the contract using trucks the DBE owns, insures, and operates using drivers it employs (not 1099/independent contractors).

The DBE may lease trucks on a long-term basis (a year or more) and receive full DBE credit as long as employees of the DBE operate the truck.

A lease must indicate the DBE has exclusive use of and control over the truck, including responsibility of maintenance and insurance. This does not preclude the leased truck from working for others during the term of the lease with the DBE's consent as long as the lease gives the DBE absolute priority for use of the leased truck. Leased trucks must display the DBE's name and identification number as well.

The DBE must carry a copy of the lease agreement in the leased truck when working onsite.

Truck Monitoring:

Credit for expenditures with DBEs for materials or supplies toward the DBE goal is described as follows:

1. A DBE firm may be a regular dealer in bulk items such as petroleum products, steel, cement, gravel, stone, or asphalt without owning, operating, or maintaining a place of business if the firm both owns and operates distribution equipment for the products. Any supplementation of a regular dealer's own distribution equipment shall be by a long-term lease agreement and not on an ad hoc or contract-by-contract basis.
2. When the materials or supplies are obtained from a DBE Materials and Supplies Vendor (MSV) manufacturer the prime contractor may receive credit for 100 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a manufacturer is a firm that operates or maintains a factory or establishment that produces on the premises the materials, supplies, articles, or equipment required under the contract and of the general character described by the specifications.
3. When the materials or supplies are purchased from a DBE MSV regular dealer or supplier, the prime contractor may receive credit for up to 60 percent of the cost of the materials or supplies toward the DBE goal. For purposes of this section, a regular dealer or supplier is a firm that owns, operates, or maintains a store, warehouse, or other establishment in which the materials, supplies, articles or equipment of the general character described by the specifications and required under the contract are bought, kept in stock, and regularly sold or leased to the public in the usual course of business.

Historically, 60% of the cost of materials and supplies purchased from a DBE MSV (100% from a DBE MSV manufacturer) would normally be counted toward DBE goals. Effective September 1, 2018:

- Prime contractors must obtain information about the method of procurement for each item to be procured from a DBE MSV. The DBE Affirmation Form has been modified to accommodate this information.

- To be eligible to receive 100% credit toward DBE goals for a materials and supplies subcontract:
 - The DBE MSV must be certified with the correct (manufacturer) NAICS code for the item
 - The DBE MSV must be certified with the correct descriptor for the item
 - The role the DBE MSV will play on the specific procurement in question must be consistent with the manufacture of the item, as indicated by the information provided by the DBE MSV

- To be eligible to receive 60% credit toward DBE goals for a materials and supplies subcontract:
 - The DBE MSV must be certified with the correct (wholesale or retail) NAICS code for the item
 - The DBE MSV must be certified with the correct descriptor for the item
 - The role the DBE MSV will play on the specific procurement in question must be consistent with the regular sale or lease of the item, as indicated by the information provided by the DBE MSV
 - The item must not be drop-shipped

- The above scenario applies to both bulk items (petroleum products, steel, cement, gravel, stone, asphalt, and others that ODOT may consider to be bulk items) and non-bulk items. For bulk items, there is an additional scenario whereby a contract with a DBE MSV could receive 60% credit. To be eligible to receive 60% credit toward DBE goals for a bulk item materials and supplies subcontract:
 - The DBE MSV must be certified with the correct (wholesale or retail and trucking) NAICS codes for the item
 - The DBE MSV must be certified with the correct descriptor for the item
 - The role the DBE MSV will play on the specific procurement in question must be consistent with the regular sale or lease of the item, as indicated by the information provided by the DBE MSV
 - The DBE MSV must deliver the bulk item from a non-DBE vendor to the prime contractor using distribution equipment that it both owns [or for which it has a long-term (1 year or more) lease] and operates with its regular (not ad hoc) employees

- If not eligible for 100% or 60% credit, an item may still be eligible for credit toward DBE goals, but only for the fee or commission the DBE MSV receives for its services, and only if the following additional criteria are met:
 - The DBE MSV must be certified with NAICS code 425120 Wholesale Trade Agents and Brokers
 - The DBE MSV must convincingly explain how the prime contractor benefits by transacting business with it rather than directly with the non-DBE vendor from which the DBE MSV is re-selling

- The usual good faith efforts process applies.
- All credit toward DBE goals is conditional. Actual credit will be determined based upon invoices, receipts, and/or transportation documents/bills of lading, which must be submitted to ODOT as they are received throughout the course of the project.

DBE TRUCKING DISCLOSURE AFFIDAVIT

In order to ensure the prime contractors are monitoring DBE trucking/hauling operations on projects with federal funding, prime contractors must complete the DBE Trucking Disclosure Affidavits Section (“Affidavit”) when completing and submitting the Prompt Payment Spreadsheet for reimbursement. The Affidavit will be completed by the prime contractor on the Prompt Payment Spreadsheet and, once submitted, will be routed to the project’s SharePoint site. This information will be used to affirm DBE and non-DBE trucking utilized by each DBE firm performing those duties during the previous month. The LPA and ODOT will monitor trucking with the following requirements for all Local-let projects:

- Prime contractors will be required to provide a master list of all anticipated DBE trucking firms to the District Construction Monitor (DCM) at the time of the Pre-Construction Meeting.
 - If no DBE trucking is anticipated on a project, the prime contractor will check the box “No Anticipated DBE Trucking Affidavit” on the first submittal of the Prompt Payment Spreadsheet. If DBE trucking/hauling does occur, the prime contractor must notify the LPA within seven (7) days of the DBE trucking activity. The prime contractor will then complete the Affidavits as required below on each Prompt Payment Spreadsheet.
- Prime contractors will be required to complete the Affidavit disclosing the DBE trucking operations during the previous month when completing the new Prompt Payment Spreadsheet. The prime contractor will complete the Trucking Affidavit section on the Prompt Payment Spreadsheet on each reimbursement submittal. The prime contractor will select one of the following options on the Trucking Affidavit section of the form.
 - The DBE firm performed trucking by utilizing their own equipment and workforce and/or work was subcontracted to another DBE (i.e., only trucking that can be counted for DBE participation was utilized).
 - No other information is required. The prime contractor will sign and submit the Affidavit.
 - The DBE firm utilized DBE & Non-DBE trucking.
 - If selected, the prime contractor will provide a list of non-DBE trucking that was utilized (i.e., not all trucking will earn DBE credit).
 - No trucking was performed.
 - No other information is required. The prime contractor will sign and submit the Affidavit.
- The DCM will perform a check of the Affidavit when reviewing the Prompt Payment Spreadsheet when submitted for reimbursement. The LPA and/or Compliance Managers will follow up on any red flags. For example, if the LPA compares information collected during the CUF process with the affidavit and sees any discrepancies. (Prompt Payment, DBE Tracking and CUF | Ohio Department of Transportation)
- Trucking will continue to be monitored at project sites by construction field staff and the LPAs.

SANCTIONS AND ADMINISTRATIVE REMEDIES

Failure by the prime contractor to follow the DBE Trucking Disclosure Affidavit requirements may result in the issuance of sanctions as follows:

- 1st Level Occurrence: The Department will issue a Letter of Reprimand to the contractor (applies if there is a failure to submit the Affidavits and/or the Affidavits are not submitted timely; if the prime contractor completes the No Anticipated DBE Trucking Affidavit, utilizes DBE trucking, and does not notify the LPA within seven (7) days of the activity).

- 2nd Level Occurrence: The Department may withhold an estimate in the amount due to the DBE trucking firm the Affidavit was not submitted for (applies if there is a failure to submit the Affidavits and/or the Affidavits are not submitted timely; if the prime contractor completes the No Anticipated DBE Trucking Affidavit, utilizes DBE trucking and does not notify the LPA within seven (7) days of the activity).
- 3rd Level Occurrence: If a pattern of not submitting the Affidavit(s) persists or the contractor has falsified, misrepresented, or withheld information; ODOT can pursue other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to the following:

- The contractor’s past project practices,
- The magnitude and the type of offense,
- The degree of the contractor’s culpability,
- Any steps taken to rectify,
- The contractor’s record of performance on other projects, and
- The number of times the contractor has been previously sanctioned by ODOT.

DBE MSV DIRECTORY - <http://www.dot.state.oh.us/Divisions/ODI/SDBE/Pages/DBE-Directory.aspx> (select MSV only)

DBE AFFIRMATION FORM - The new DBE Affirmation Form is now available at [DBE Affirmation Form - Projects Sold on or after 9/1/18 | Ohio Department of Transportation.](#)

Opening Prompt Payment (PP) Spreadsheet (Trucking Affidavit Section on PP Spreadsheet) through GoFormz:

1. Obtain a MyODOT account
 - a. Click [Link](#)
 - b. Click “Launch MyODOT”
 - c. Click: “Click Here”
 - d. Complete Account Application under “Request an Account”
2. Getting GoFormz Access
 - a. Email GoFormz.Help@dot.ohio.gov put Create GoFormz Account in the subject line
 - b. Login for GoFormz will be emailed back
 - c. Click www.goformz.com

Additional guidance can be found by Clicking Here

23. PN 013 – 10/20/23 DISADVANTAGED BUSINESS ENTERPRISE (DBE) UTILIZATION PLAN AND GOOD FAITH EFFORTS – LPA Projects

DEFINITION OF *DAYS*

Unless otherwise noted, *days* means calendar days, but in computing any period of time described in this proposal note, the day from which the period begins to run is not counted, and when the last day of the period is a Saturday, Sunday, or Federal or State holiday, the period extends to the next day that is not a Saturday, Sunday, or Federal or State holiday. See <https://www.opm.gov/policy-data-oversight/pay-leave/federal-holidays> for a list of Federal holidays. State holidays are those designated in division (A) of section 124.19 of the Revised Code (<https://codes.ohio.gov/ohio-revised-code/section-124.19>), with modifications as designated in the first two sentences of division (B)(4) of section 124.18 of the Revised Code (<https://codes.ohio.gov/ohio-revised-code/section-124.18>). (State holidays are generally the same as Federal holidays.)

DBE UTILIZATION PLAN

The bidder's DBE Utilization Plan **must be submitted by the bidder prior to bid opening at https://odot.formstack.com/forms/dbe_copy**. By submitting a DBE Utilization Plan, the Bidder affirms it will be using the DBE firms identified in the Utilization Plan to meet the DBE contract goal. The Bidder further affirms it will not deviate from the Utilization Plan without ODOT's prior written consent.

Unless the bidder is a certified DBE firm, **a bid opened without a DBE Utilization Plan submitted prior to bid opening will be deemed unresponsive.**

The DBE Utilization Plan shall include the following information:

1. The names of the certified DBE firms(s) that will be used to meet the DBE goal
2. A description of the work each DBE will perform. To count toward meeting a goal, each DBE firm must be certified in a NAICS code applicable to the kind of work the firm would perform on the contract
3. Whether the DBE firms(s) being used to meet the goal will be utilized as a subcontractor, regular dealer, manufacturer, consultant, or other capacity
4. The dollar amount of the participation of each DBE firm used to meet the DBE goal.

PROJECTS AWARDED ON ALTERNATES

In the event the project is awarded on alternates, which increases or decreases the total dollar amount of the bid, a revision to the DBE Utilization Plan and DBE Affirmation Form(s) shall be submitted and approved by the Office of Business & Economic Opportunity within five (5) days after the notification of the alternates.

DBE AFFIRMATION

The Apparent Low Bidder (ALB) shall ensure the DBE firms being utilized to meet the DBE goal affirm their participation in the bid within five (5) days after the bid opening to ODOT. The contract dollar amount(s) and/or DBE firm(s) included in the ALB's DBE Utilization Plan must match the contract dollar amount(s) and/or DBE firm(s) included on the DBE Affirmation Form(s). If the contract dollar amount(s) and/or DBE firm(s) do not match, the ALB shall utilize the Request for Consent to Terminate/Reduce a DBE Commitment form located at [DBE Commitment Reduction or Termination Form | Ohio Department of Transportation](#) and submit for review and approval by the Office of Business & Economic Opportunity within five (5) days of the bid opening.

The ALB shall utilize the DBE Affirmation Form located at [DBE Affirmation Form - Projects Sold on or after 9/1/18 | Ohio Department of Transportation](#). The DBE Affirmation Form will be utilized as written confirmation from each listed DBE firm that it is participating in the contract in the type and amount of work provided in the bidder's DBE Utilization Plan. The ALB shall submit a separate DBE Affirmation Form for each DBE it is utilizing for the DBE goal as well as their Good Faith Efforts package if they were not able to attain the DBE Goal via DBE participation.

All other bidders shall submit a DBE Affirmation Form(s) if notified the information is required in order for ODOT to complete its assessment. Bidders shall have five (5) days from the date of notification to submit all required DBE Affirmation Forms to ODOT. Notification will be by email.

In the event a DBE firm fails to confirm the information contained in the DBE Affirmation Form within five (5) days of bid opening, the ALB shall submit a Request for Consent to Terminate/Reduce a DBE Commitment form, as set forth herein. The Request for Consent to Terminate/Reduce a DBE Commitment form shall be submitted within five (5) days after bid opening in order for the ALB to still be considered for contract award. The ALB shall include as its reason for termination the DBE firm's failure to provide a timely affirmation and should include all efforts the ALB made to obtain the affirmation from the DBE firm and shall attach proof of these efforts, if available. If the ALB intends to replace the DBE Firm, it shall include the replacement firm's information on the form. In the event the ALB is unable to affirm a DBE firm included in its original DBE Utilization Plan at bid submission and it results in a goal shortfall, Good Faith Efforts (GFE's) must be submitted by the fifth day after bid opening. All GFE documentation submitted for consideration should demonstrate the efforts the bidder made prior to the time of bid submission to secure sufficient DBE participation on the

project to meet the DBE goal although the bidder was unable to do so. A DBE firm's failure to timely confirm information contained in the DBE Affirmation Form will be considered as good cause to terminate the DBE firm and will also be considered a part of the ALB's Good Faith Efforts in meeting the goal.

DBE BIDDERS

In the event the Bidder is a certified DBE firm, the Bidder is not required to complete a DBE Utilization Plan as set forth above and would not need to submit a DBE Affirmation Form for the work it is planning to self-perform in order to meet the goal.

JOINT VENTURES

If the bidder is a Joint Venture, the Joint Venture will only be considered a Certified DBE firm if the Joint Venture itself has been certified. The Joint Venture may, however, utilize a Certified DBE firm that is also a partner in the Joint Venture as part of its DBE Utilization Plan. The Certified DBE Firm/Joint Venture Partner, however, does not need to submit a DBE Affirmation Form for any work the Certified DBE Firm/Joint Venture Partner is going to perform to meet the goal. ODOT will consider submission of the Joint Venture's bid as the Certified DBE Firm/Joint Venture Partner's confirmation that it is participating in the contract.

GOOD FAITH EFFORTS (GFE's)

If the DBE contract goal established by ODOT is not met, the ALB shall demonstrate it made adequate good faith efforts to meet the goal, even though it did not succeed in obtaining enough DBE participation to do so.

If the ALB does not meet the goal at bid time, the ALB shall submit its Good Faith Efforts (GFE's) documentation within five (5) days of the bid opening. Submission of DBE affirmation(s) with additional participation sufficient to meet the DBE contract goal does not cure the ALB's failure to meet the goal at bid time or eliminate the ALB's responsibility of submitting GFE's within five (5) days of the bid opening.

The ALB shall demonstrate its GFE's by submitting the following information within five (5) days after the bid opening:

1. All written quotes received from certified DBE firms
2. All written (including email) communications between the ALB and DBE firms
3. All written solicitations to DBE firms, even if unsuccessful
4. Copies of each non-DBE quote when a non-DBE was selected over a DBE for work on the contract
5. Phone logs of communications with DBE firms

The ALB shall utilize the Pre-Bid GFE Template to document their GFE's. This template and supporting documentation shall be sent along with any DBE Affirmation Forms within five (5) days of bid opening. ODOT has provided Good Faith Efforts Guidance located at [Good Faith Efforts \(GFE\) for Contractors | Ohio Department of Transportation](#)

All other bidders shall submit documentation of GFE's if notified the information is required in order for ODOT to complete its bid assessment. Bidders shall have five (5) days from the date of notification to submit all required GFE documentation. Notification will be by email.

ODOT shall utilize the guidance set forth in 49 CFR §26.53 Appendix A in determining whether the bidder has made adequate good faith efforts to meet the goal.

ADMINISTRATIVE RECONSIDERATION

ODOT will review the GFE documentation and issue a written determination on whether adequate GFE's have been demonstrated prior to contract award. If ODOT determines the ALB has failed to demonstrate adequate GFE's to meet the goal, the ALB will have an opportunity for administrative reconsideration prior to the contract being awarded.

As part of this reconsideration, the ALB may provide written documentation or argument concerning the issue of whether it met the goal or made adequate good faith efforts to do so. Such written documentation or argument must be provided to ODOT, attention to the Office of Chief Legal Counsel, 1980 West Broad Street, MS 1500, Columbus, Ohio 43223 (with copy to the Office of Contract Sales, MS 4110), within two (2) business days of ODOT's written determination that GFE's were not adequately demonstrated. The ALB may also include in their written documentation a request for an in-person meeting to discuss the issue of whether it met the goal or made adequate good faith efforts to do so. ODOT's Office of Chief Legal Counsel will respond to the ALB within five (5) business days of receiving written documentation or holding the in-person meeting.

ODOT will send the ALB a written decision on reconsideration explaining the basis for finding that the ALB did or did not meet the goal or make adequate good faith efforts to do so. The result of the reconsideration process is not administratively appealable to the United States Department of Transportation.

TERMINATION OR REPLACEMENT OF A DBE

By submitting a DBE Utilization Plan, the bidder is committing to use the DBE firms identified in the plan. The ALB/Awarded Contractor shall utilize the specific DBEs listed in the DBE Utilization Plan to perform the work and supply the materials for which each is listed unless the ALB/Awarded Contractor obtains written consent as provided in this paragraph. In order to request termination or substitution of a DBE firm, the ALB/Awarded Contractor shall utilize the Request for Consent to Terminate/Reduce a DBE Commitment form located at [DBE Commitment Reduction or Termination Form | Ohio Department of Transportation](#).

This termination/replacement procedure applies only to DBE firms or the amount of work being utilized to meet the goal.

Without ODOT's written consent to terminate/replace a DBE firm being utilized to meet the goal, the Awarded Contractor shall not be entitled to any payment for DBE listed work or material unless it is performed or supplied by the listed DBE.

GOOD CAUSE

ODOT may provide written consent to terminate a DBE only if it agrees, for reasons stated in a concurrence document, the ALB/Awarded Contractor has good cause to terminate the DBE firm.

For purposes of this section, good cause to terminate a DBE includes the following circumstances:

- 1) The listed DBE firm fails or refuses to provide the required DBE Affirmation Form or to execute a written contract
- 2) The listed DBE firm fails or refuses to perform the work of its subcontract in a manner consistent with normal industry standards. Provided, however, that good cause does not exist if the failure or refusal of the DBE firm to perform its work on the subcontract results from the bad faith or discriminatory action of the awarded contractor
- 3) The listed DBE firm fails or refuses to meet the awarded contractor's reasonable, nondiscriminatory bond requirements.
- 4) The listed DBE firm becomes bankrupt, insolvent, or exhibits credit unworthiness
- 5) The listed DBE firm is ineligible to work on public works projects because of suspension and debarment proceedings pursuant 2 CFR Parts 180, 215 and 1200 or applicable state law
- 6) ODOT has determined the listed DBE firm is not a responsible contractor
- 7) The listed DBE firm voluntarily withdraws from the project and provides to the contractor written notice of its withdrawal
- 8) The listed DBE is ineligible to receive DBE credit for the type of work required
- 9) A DBE owner dies or becomes disabled with the result that the listed DBE contractor is unable to complete its work on the contract; and
- 10) Other documented good cause that ODOT determines compels the termination of the DBE firm. Provided that good cause does not exist if the awarded contractor seeks to terminate a DBE it relied upon to obtain the

contract so the awarded contractor can self-perform the work for which the DBE contractor was engaged or so the awarded contractor can substitute another DBE or non-DBE contractor after contract award.

REPLACEMENT

When a DBE firm is terminated or fails to complete its work on the contract for any reason, the Awarded Contractor must make GFEs to find another DBE firm to replace the original DBE. These GFEs shall be directed at finding another DBE to perform at least the same amount of work under the contract as the DBE that was terminated, to the extent needed to meet the contract goal. The GFEs shall be documented by the Awarded Contractor. If ODOT requests documentation under this provision, the Awarded Contractor shall submit the documentation within seven (7) days, which may be extended for an additional seven (7) days if necessary, at the request of the contractor, and ODOT shall provide a written determination to the contractor stating whether GFEs have been demonstrated.

In addition to post-award terminations, the provisions of this section apply to pre-award deletions and substitutions of DBE firms put forward by bidders in the DBE Utilization Plan.

ADDITION

In the event additional DBE participation is required for the project, the Awarded Contractor shall utilize the DBE Affirmation Form located at [DBE Affirmation Form - Projects Sold on or after 9/1/18 | Ohio Department of Transportation](#). The DBE Affirmation Form will be utilized as written confirmation from each DBE firm that it is participating in the contract in the kind and amount of work on the project.

WRITTEN NOTICE TO DBE

Before transmitting to ODOT its request to terminate and/or substitute a DBE firm, the ALB/Awarded Contractor must give notice in writing to the DBE firm with a copy to ODOT of its intent to request to terminate and/or substitute and the reason(s) for the request.

The ALB/Awarded Contractor must give the DBE five (5) days to respond to the notice, advising ODOT and the ALB/Awarded Contractor of the reasons, if any, why it objects to the proposed termination of its subcontract and why ODOT should not approve the ALB/Awarded Contractor's action. If required in a particular case as a matter of public necessity (e.g., safety), ODOT may provide a response period shorter than five (5) days.

GOAL ATTAINMENT POST AWARD

The Awarded Contractor shall make available upon request a copy of all DBE subcontracts. The Awarded Contractor shall ensure that all subcontracts or agreements with DBEs require that the subcontract and all lower-tier subcontracts be performed in accordance with this Proposal Note.

Approval of a DBE Utilization Plan does not ensure approval of C-92 Requests to Sublet, nor does approval of a DBE Utilization Plan indicate the DBE goal has been met. ODOT will monitor goal attainment throughout the life of the project. It is the responsibility of the Awarded Contractor to advise ODOT of any changes to the DBE Utilization plan throughout the life of the project. The DBE goal of a project is stated as a percentage of the contract. In the event the contract amount increases or decreases, the actual dollar amount of the DBE goal for the project may increase or decrease accordingly.

SANCTIONS AND ADMINISTRATIVE REMEDIES

PRE-BID

Failure by the ALB to do any of the following shall result in the bid being rejected as non-responsive in accordance with ORC §5525.08:

1. Failure to submit a complete DBE Utilization Plan at the time of bid
2. Failure to submit DBE Affirmation Form(s) and/or failure to submit Request for Consent to Terminate/Reduce a DBE Commitment form(s) as required by this Proposal Note; or
3. Failure to meet the goal and/or failure to demonstrate GFEs to meet the goal as required by this Proposal Note.

POST-BID

Failure by the Awarded Contractor to carry out the requirements of this Proposal Note, including the submission of adequate good faith efforts to meet the goal for a project, is a material breach of the contract and may result in the issuance of sanctions as follows:

- 1st Tier: Letter of Reprimand
- 2nd Tier: Damages equivalent to the DBE shortfall
- 3rd Tier: If a pattern of paying damages persists or the contractor has falsified, misrepresented, or withheld information, ODOT can pursue other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to, the following:

- the magnitude and the type of offense
- the degree of the contractor's culpability
- any steps taken to rectify
- the contractor's record of performance on other projects including, but not limited to:
 - annual DBE participation
 - annual DBE participation on projects without goals
 - the number of complaints ODOT has received regarding the contractor
 - the number of times the contractor has been previously sanctioned by ODOT

24. PN 031 - 6/27/2023 – PROMPT PAYMENT - LOCAL-LET CONSTRUCTION PROJECTS

The U.S. Department of Transportation's (USDOT's) rules related to Disadvantaged Business Enterprises are published in 49 CFR Part 26. Within 49 CFR Part 26, 49 CFR 26.29 lays out the prompt payment requirements that apply to ODOT (the Department), its subrecipients (LPA's), and, by extension, both prime contractors and subcontractors (including non-DBEs). The 49 CFR 26.29 requirements apply only to federally funded contracts (i.e., contracts with DOT financial assistance). The prime contractor must comply with this Proposal Note and the Department's prompt payment requirements as published in 107.21 of the C&MS.

Second-tier subcontract means a subcontract awarded directly by the subcontractor for the purpose of acquiring supplies or services (including construction) for performance of a prime contract. It does not include the contractor's supplier agreements with vendors, such as long-term arrangements for materials or supplies that benefit multiple contracts and/or the costs of which are normally applied to a contractor's general and administrative expenses or indirect costs.

The Department will monitor payments made by prime contractors and subcontractors for compliance with this Proposal Note, C&MS 107.21 and, where applicable, 49 CFR 26.29. To facilitate this monitoring, the Department requires both prime **and** subcontractors to report their payments to all subcontractors/second-tier subcontractors with the submission of each invoice. The payment data reported must include any retainage withheld (*when allowable under the Department's Retainage Policy dated 4/14/21*) and any previously withheld retainage released. All such reporting must take place

through a web-based submission on GoFormz. Please note: submission through GoFormz is required for all Local-let projects. Invoices will not be approved and processed for payment unless this reporting form has been submitted and received by the Department.

The prime/subcontractor must report the following information:

- The name of the payee
- The dollar amount of the payment to the payee
- The date the payee was paid
- The amount of retainage withheld (if any)

Ohio's 10-day prompt payment requirement is based on the payer's payment issuance date and NOT the payee's payment receipt date.

The prime/subcontractor must sign each reported payment and submit to ODOT via the GoFormz website.

The second-tier subcontractor is responsible for completing the affirmation of payment form in GoFormz.

The prime is responsible for ensuring that all subcontractors and second-tier subcontractors are correctly completing all prompt payment forms via the GoFormz website.

If the prime or subcontractor(s) fail to submit the aforementioned documentation with each invoice, they will be determined to be non-compliant and invoices will not be processed for payment.

Payees must verify each payment reported by the payer within thirty (30) days of the payment being signed by the payer. This verification must include:

- Whether the payment was received, and if so, whether it was or was not as expected
- The dollar amount of the payment received
- The date the payment was received

The prime contractor shall fully complete the last prompt payment form upon receipt of final payment.

SANCTIONS AND ADMINISTRATIVE REMEDIES

Failure by the prime contractor and/or subcontractor(s) to follow Prompt Payment requirements may result in the issuance of sanctions as follows:

- 1st Tier: Notice of Violation followed by a Letter of Reprimand
- 2nd Tier: If corrective actions are not taken within the specified three (3) business days, a pay estimate in the amount due to the subcontractor(s) that was not reported or paid may be withheld.
- 3rd Tier: If a pattern of paying damages persists or the contractor has falsified, misrepresented, or withheld information, ODOT can pursue other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to the following:

- the magnitude and the type of offense
- the degree of the contractor's culpability
- any steps taken to rectify
- the contractor's record of performance on other projects
- the number of times the contractor has been previously sanctioned by ODOT

25. WAIVER OF C&MS 614.03

ODOT's 2023 C&MS section 614.03, third paragraph, does not apply to any project which is not physically located on the National Highway System (NHS), and/or does not impact NHS traffic in any way.

26. ODOT AS OBLIGEE ON BOND

The contractor shall furnish a performance and payment bond in an amount at least equal to 100 percent of the estimate as security for the faithful performance of its contract. In addition to the project owner, ODOT shall be named as an obligee.

27. NON-DISCRIMINATION PROVISIONS

A. Compliance with Regulations: The contractor will comply with the regulations relative to nondiscrimination in Federally-assisted programs of the USDOT Title 49 CFR, Part 21, as they may be amended from time to time, (hereinafter referred to as the "Regulations"), which are herein incorporated by reference and made a part of this contract.

In addition, the contractor will comply with the provisions of the Americans with Disabilities Act, Section 504 of the Rehabilitation Act, FHWA Guidance, and any other Federal, State, and/or local laws, rules and/or regulations (hereinafter referred to as "ADA/504").

B. Nondiscrimination: The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, national origin, sex, age, or disability, in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate, either directly or indirectly, in the discrimination prohibited by section 21.5 of the Regulations, including employment practices when the contract covers a program set forth in Appendix B of the Regulations, as well as the ADA/504 regulations.

C. Solicitations for Contractors or Subcontractors, including Procurement of Materials and Equipment: In all solicitations either by competitive bidding or negotiation made by the contractor for work to be performed under a contract or subcontract including procurements of materials or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Regulations relative to nondiscrimination on the grounds of race, color, national origin, sex, age, or disability.

D. Information and Reports: The contractor will provide all information and reports required by the Regulations or directives issued pursuant thereto, and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the State or FHWA to be pertinent to ascertain compliance with such Regulations, orders, and instructions. Where any information required of the contractor is in the exclusive possession of another who fails or refuses to furnish this information, the contractor will so certify to the State or FHWA, as appropriate, and will set forth what efforts it has made to obtain the information.

E. Sanctions for Noncompliance: In the event of the contractor's noncompliance with the nondiscrimination provisions of this contract, the LPA will impose such contract sanctions as it or State/FHWA may determine to be appropriate, including, but not limited to:

- (1) Withholding of payments to the contractor under the contract until the contractor complies, and/or
- (2) Cancellation, termination, or suspension of the contract, in whole or in part.

F. Incorporation of Provisions: The contractor will include the provisions of paragraphs (A) through (E) above in every contract or subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The contractor will take such action with respect to any subcontractor procurement as the LPA or State/FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance; provided, however, in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the contractor may request the LPA/State to enter into such litigation to protect the

interests of the LPA and the State. In addition, the LPA/State may request the United States to enter into such litigation to protect the interests of the United States.

28. PN 015 - 04/17/2020 - CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS

The required contract provisions for federal-aid construction contracts are hereby incorporated by reference as if rewritten herein. The current version of Form FHWA-1273 (available at <https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf>) shall be physically incorporated in all contracts, subcontracts, and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreement for supplies or services related to a construction contract). The prime contractor shall be responsible for ensuring that the FHWA-1273 is physically incorporated into all lower-tier subcontracts.

SANCTIONS AND ADMINISTRATIVE REMEDIES

Failure by the prime contractor to include the provisions of FHWA-1273 in their contract or in their lower-tier subcontracts may result in the issuance of sanctions as follows:

1st Tier: Letter of Reprimand

2nd Tier: Damages equivalent to the daily liquidated damages amount found in section 108.07 for each incident of non-compliance

3rd Tier: If a pattern of paying damages persists or the contractor has falsified, misrepresented, or withheld information, the LPA can pursue other remedies available by law including suspension, revocation, and/or debarment.

Factors to be considered in issuing sanctions may include, but are not limited to the following:

- the magnitude and the type of offense
- the degree of the contractor's culpability
- any steps taken to rectify
- the contractor's record of performance on other projects; and
- the number of times the contractor has been previously sanctioned by the LPA.

29. PN 032 – 01/31/2021 – C92s REQUIRED ON LOCAL-LET CONSTRUCTION PROJECTS

State and Federal law requires that all contractors and subcontractors participating on state or federally funded projects be evidenced in writing and in conformity with all applicable state and federal laws and regulations.

Effective immediately, all projects advertising after 2/1/2021 will require that a Request to Sublet (C92) form is completed for each subcontractor and DBE materials supplier working on the project prior to the start of work.

A template for this form may be found and submit via the GoFormz website located at www.goformz.com.

30. REQUIRED CONTRACT PROVISIONS FOR FEDERAL-AID CONSTRUCTION CONTRACTS (Electronic Form FHWA 1273 – October 23, 2023) (SEE NEXT PAGE)

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- I. General
- II. Nondiscrimination
- III. Non-segregated Facilities
- IV. Davis-Bacon and Related Act Provisions
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract
- VII. Safety: Accident Prevention
- VIII. False Statements Concerning Highway Projects
- IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
- X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
- XI. Certification Regarding Use of Contract Funds for Lobbying
- XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work

performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (see 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide

sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to:

- (1) Withholding monthly progress payments;
- (2) Assessing sanctions;
- (3) Liquidated damages; and/or
- (4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than \$10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway

Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH-1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to DBAconformance@dol.gov. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to DBAconformance@dol.gov, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division

under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901–3907](#).

3. Records and certified payrolls (29 CFR 5.5)

a. Basic record requirements (1) Length of record retention. All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) Information required. Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) Additional records relating to fringe benefits. Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in [40 U.S.C. 3141\(2\)\(B\)](#) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) Additional records relating to apprenticeship. Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. Certified payroll requirements (1) Frequency and method of submission. The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting

agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) Information required. The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (e.g., the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH-347 or in any other format desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division website at <https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347.pdf> or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) Statement of Compliance. Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in [29 CFR part 3](#); and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) Use of Optional Form WH-347. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature*. The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification*. The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under [18 U.S.C. 1001](#) and [31 U.S.C. 3729](#).

(7) *Length of certified payroll retention*. The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents*. The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers*. The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements*. If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under [29 CFR part 6](#) any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures*. Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address

of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay*. Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits*. Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio*. The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates*. Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity*. The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and [29 CFR part 30](#).

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of [40 U.S.C. 3144\(b\)](#) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, [18 U.S.C. 1001](#).

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#);

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#); or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or [29 CFR part 1](#) or [3](#).

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* \$31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

- (1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;
- (2) A contracting agency for its procurement costs;
- (3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;
- (4) A contractor's assignee(s);
- (5) A contractor's successor(s); or
- (6) A claim asserted under the Prompt Payment Act, [31 U.S.C. 3901-3907](#).

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the

event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

- a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;
- b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;
- c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or
- d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

- (1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
- (2) the prime contractor remains responsible for the quality of the work of the leased employees;

- (3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and
- (4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and

health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of \$150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1. Instructions for Certification – First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which

this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (<https://www.sam.gov/>), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or

cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B) This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:
 - a. To the extent that qualified persons regularly residing in the area are not available.
 - b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.
 - c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.
2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.
3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.
4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SUPPLEMENTARY SPECIFICATIONS
AND SPECIAL CONDITIONS

Item 201- All trees shown all plan have been removed by the City. The tree stumps/roots are still remaining and shall be removed by contractor.

UTILITY NOTE
FRA-SELBY BLVD WEST BRIDGE; PID 116037
March 14, 2024

“Bidders are advised that the following utility facilities will not be cleared from the construction area at the time of award of the contract. These utility facilities will remain in place or be relocated within the construction limits of the project as set out below.”

AMERICAN ELECTRIC POWER (AEP)

AEP has existing poles and overhead facilities (street lighting) located within the right-of-way, including two poles in conflict with the project.

The City of Worthington is to request removal of the light poles (by AEP). AEP shall begin removal of poles and appurtenances by **May 27, 2024** and will come completed work no later than **May 31, 2024**. Upon completion of the project, the City of Worthington shall request reinstallation.

Paul Paxton
777 Hopewell Drive
Heath, Ohio 43056
740-348-5322
ptpaxton@aep.com
ohfiberrelocate@aep.com
AEP Solution Center 800-277-2177

COLUMBIA GAS

Columbia Gas has existing facilities in the right-of-way that will be in conflict with the proposed structure and foundation.

Columbia Gas is abandoning the gas main in the vicinity of the project limits. The main will be abandoned in place. To maintain service to the neighborhood, Columbia Gas will be installing a temporary facility within existing right of way outside of the project limits. Columbia Gas will start abandonment of the gas main on **April 15, 2024**. Columbia Gas shall abandon the facilities within the project limits no later than **May 31, 2024**. Columbia Gas plans to reinstall the gas main through the project limits after the Contractor completes stage 3 during Stage 4 of the sequence of construction. Contractor shall be required to coordinate the timing of the stage 4 work with Columbia Gas as required to accommodate the gas line installation.

Michael Doran
3350 Johnny Appleseed Ct. Columbus, Ohio 43231
Phone: 614-557-0478
mdoran@nisource.com

CITY OF COLUMBUS Facilities -Water

The City of Columbus has an existing water line within the project limits. Relocation of the waterline is included as part of this project. Contractor will need to coordinate relocation in conjunction with roadway and bridge improvements.

Columbus Division of Water
Timothy Huffman
TEHuffman@columbus.gov
910 Dublin Rd, Columbus, OH, 43215
Office: 614-645-7788

GENERAL COMMENTS

The Contractor shall exercise caution when working in proximity to the existing and/or relocated utility facilities.

Bidders are advised that some utility relocation plans are on file and may be reviewed by sending a request to john.moorehead@worthington.org

Section 3781.30 of the Ohio Revised Code requires among other things, that the contractor protect and preserve the markings of approximate locations of underground utility facilities and to conduct the excavation in the vicinity of underground utility facilities in a careful and prudent manner.

1. STATUS OF RAILROAD OPERATING FACILITIES

None affected.

2. ENCROACHMENTS

There are no improvements or obstructions located within the limits of this project.

3. COMPLIANCE STATEMENT

All right of way acquisitions and all relocation activities, if any, have been done in compliance with 23 CFR 635.309(c)(2) and are also compliant to:

- 42 United States Code, Chapter 61 – The Uniform Act.
- All pertinent federal directives and regulations – to include 49 CFR Part 24.
- The current Real Estate Manual of the Ohio Department of Transportation which has been approved by FHWA.

Right of way remaining to be acquired will be acquired in accordance with FHWA directives.



Office of Environmental Services Permit Determination

Table with 4 columns: To, Attn, From, Project (CRS), Date, PID. Contains contact information and project details.

OES-WPU has reviewed the Permit Determination Request for the above-referenced project to determine the appropriate level of waterway permitting required for the project.

Are Waterway Permits Required? Yes

- U.S. Army Corps of Engineers (USACE) Individual 404 Permit Required
Ohio Environmental Protection Agency (OEPA) Individual 401 Water Quality Certification (WQC) Required
USACE Regional General Permit (RGP) Required

Select RGP Activity

USACE Nationwide Permit (NWP) Required

NWP 3. Maintenance (non-notifying)

OEPA General/Individual Isolated Wetland Permit Required

Select Isolated Wetland Permit Level

USCG Coordination Required

Select Level of Coordination

USACE Section 10 Permit Required; therefore, a Pre-Construction Notification is required to obtain Section 10 authorization.

USACE Section 408 Permission Required

Project will require a waterway permit strategy meeting to discuss individual permit application preparation, alternatives, and mitigation. District please schedule this meeting at your earliest convenience.

Mitigation is Required

Stream:

Wetland:

Comments:

OES-WPU reviewed the subject project and determined that it will meet the criteria for NWP 3 Maintenance. The local sponsor is responsible for completing the work as submitted. OES-WPU made this permit determination based upon experience with the USACE Huntington District Ohio Regulatory Transportation Office (ORTO). Coordination with OES and a reevaluation of the permit status will be required if construction is not completed by the permit expiration date 3-14-2026 or if the project design changes.

Please contact Tara Tarlton, Environmental Specialist, at 614-644-7087 with any questions, or Adrienne Earley, Waterway Permits Program Manager at 614-466-2159 with any questions.

"General Decision Number: OH20240001 04/05/2024

Superseded General Decision Number: OH20230001

State: Ohio

Construction Types: Heavy and Highway

Counties: Ohio Statewide.

Heavy and Highway Construction Projects

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(1).

If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 14026 generally applies to the contract.. The contractor must pay all covered workers at least \$17.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2024.
If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:	<ul style="list-style-type: none">. Executive Order 13658 generally applies to the contract.. The contractor must pay all covered workers at least \$12.90 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2024.

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the

Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number	Publication Date
0	01/05/2024
1	01/26/2024
2	03/08/2024
3	04/05/2024

* BROH0001-001 06/01/2023

DEFIANCE, FULTON (Excluding Fulton, Amboy & Swan Creek Townships), HENRY (Excluding Monroe, Bartlow, Liberty, Washington, Richfield, Marion, Damascus & Townships & that part of Harrison Township outside corporate limits of city of Napoleon), PAULDING, PUTNAM and WILLIAMS COUNTIES

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

* BROH0001-004 06/01/2023

	Rates	Fringes
CEMENT MASON/CONCRETE FINISHER...	\$ 32.40	19.30

* BROH0003-002 06/01/2023

FULTON (Townships of Amboy, Swan Creek & Fulton), HENRY (Townships of Washington, Damascus, Richfield, Bartlow, Liberty, Harrison, Monroe, & Marion), LUCAS and WOOD (Townships of Perrysburg, Ross, Lake, Troy, Freedom, Montgomery, Webster, Center, Portage, Middleton, Plain, Liberty, Henry, Washington, Weston, Milton, Jackson & Grand Rapids) COUNTIES

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

BROH0005-003 06/01/2020

CUYAHOGA, LORAIN & MEDINA (Hinckley, Granger, Brunswick, Liverpool, Montville, York, Homer, Harrisville, Chatham, Litchfield & Spencer Townships and the city of Medina)

	Rates	Fringes
BRICKLAYER		
BRICKLAYERS; CAULKERS; CLEANERS; POINTERS; & STONEMASONS.....	\$ 36.64	17.13
SANDBLASTERS.....	\$ 36.39	17.13
SEWER BRICKLAYERS & STACK BUILDERS.....	\$ 36.64	17.13
SWING SCAFFOLDS.....	\$ 37.14	17.13

* BROH0006-005 06/01/2023

CARROLL, COLUMBIANA (Knox, Butler, West & Hanover Townships), STARK & TUSCARAWAS

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

* BROH0007-002 06/01/2023

LAWRENCE

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

* BROH0007-005 06/01/2023

PORTAGE & SUMMIT

	Rates	Fringes
BRICKLAYER.....	\$ 32.40	19.30

* BROH0007-010 06/01/2023

PORTAGE & SUMMIT

	Rates	Fringes
MASON - STONE.....	\$ 32.40	19.30

* BROH0008-001 06/01/2023

COLUMBIANA (Salem, Perry, Fairfield, Center, Elk Run, Middleton, & Unity Townships and the city of New Waterford), MAHONING & TRUMBULL

	Rates	Fringes
BRICKLAYER.....	\$ 32.40	19.30

* BROH0009-002 06/01/2023

BELMONT & MONROE COUNTIES and the Townships of Warren & Mt. Pleasant and the Village of Dillonvale in JEFFERSON COUNTY

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30
Refractory.....	\$ 31.45	19.01

* BROH0010-002 06/01/2023

COLUMBIANA (St. Clair, Madison, Wayne, Franklin, Washington, Yellow Creek & Liverpool Townships) & JEFFERSON (Brush Creek & Saline Townships)

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

* BROH0014-002 06/01/2023

HARRISON & JEFFERSON (Except Mt. Pleasant, Warren, Brush Creek, Saline & Salineville Townships & the Village of Dillonvale)

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

* BROH0016-002 06/01/2023

ASHTABULA, GEAUGA, and LAKE COUNTIES

	Rates	Fringes
--	-------	---------

Bricklayer, Stonemason.....\$ 32.40 19.30

* BROH0018-002 06/01/2023

BROWN, BUTLER, CLERMONT, HAMILTON, PREBLE (Gasper, Dixon,
Israel, Lanier, Somers & Gratis Townships) & WARREN COUNTIES:

Rates Fringes

Bricklayer, Stonemason.....\$ 32.40 19.30

* BROH0022-004 06/01/2023

CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, HIGHLAND, LOGAN,
MIAMI, MONTGOMERY, PREBLE (Jackson, Monroe, Harrison, Twin,
Jefferson & Washington Townships) and SHELBY COUNTIES

Rates Fringes

Bricklayer, Stonemason.....\$ 32.40 19.30

* BROH0032-001 06/01/2023

GALLIA & MEIGS

Rates Fringes

Bricklayer, Stonemason.....\$ 32.40 19.30

* BROH0035-002 06/01/2023

ALLEN, AUGLAIZE, MERCER and VAN WERT COUNTIES

Rates Fringes

Bricklayer, Stonemason.....\$ 32.40 19.30

* BROH0039-002 06/01/2023

ADAMS & SCIOTO

Rates Fringes

Bricklayer, Stonemason.....\$ 32.40 19.30

* BROH0040-003 06/01/2023

ASHLAND, CRAWFORD, HARDIN, HOLMES, MARION, MORROW, RICHLAND,

WAYNE and WYANDOT (Except Crawford, Ridge, Richland & Tymochtee Townships) COUNTIES

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

FOOTNOTE: Layout Man and Sawman rate: \$1.00 per hour above journeyman rate.
 Free standing stack work ground level to top of stack;
 Sandblasting and laying of carbon masonry material in swing stage and/or scaffold; Ramming and spading of plastics and gunniting: \$1.50 per hour above journeyman rate.
 ""Hot"" work: \$2.50 above journeyman rate.

 * BROH0044-002 06/01/2023

	Rates	Fringes
Bricklayer, Stonemason COSHOCTON, FAIRFIELD, GUERNSEY, HOCKING, KNOX, KICKING, MORGAN, MUSKINGUM, NOBLE (Beaver, Buffalo, Seneca & Wayne Townships) & PERRY COUNTIES:.....	\$ 32.40	19.30

 BROH0045-002 06/01/2021

FAYETTE, JACKSON, PIKE, ROSS and VINTON COUNTIES

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 30.40	17.66

 * BROH0046-002 06/01/2023

ERIE, HANCOCK, HURON, OTTAWA, SANDUSKY, SENECA, WOOD (Perry & Bloom Townships) and WYANDOT (Tymochtee, Crawford, Ridge & Richland Townships) COUNTIES & the Islands of Lake Erie north of Sandusky

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

FOOTNOTE: Layout Man and Sawman rate: \$1.00 per hour above journeyman rate.

Free standing stack work ground level to top of stack; Sandblasting and laying of carbon masonry material in swing stage and/or scaffold; Ramming and spading of plastics and gunniting: \$1.50 per hour above journeyman rate.

""Hot"" work: \$2.50 above journeyman rate.

* BROH0052-001 06/01/2023

ATHENS COUNTY

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

* BROH0052-003 06/01/2023

NOBLE (Brookfield, Noble, Center, Sharon, Olive, Enoch, Stock, Jackson, Jefferson & Elk Townships) and WASHINGTON COUNTIES

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

* BROH0055-003 06/01/2023

DELAWARE, FRANKLIN, MADISON, PICKAWAY and UNION COUNTIES

	Rates	Fringes
Bricklayer, Stonemason.....	\$ 32.40	19.30

CARP0003-004 05/01/2017

MAHONING & TRUMBULL

	Rates	Fringes
CARPENTER.....	\$ 26.20	17.42

CARP0069-003 05/01/2017

CARROLL, STARK, TUSCARAWAS & WAYNE

	Rates	Fringes
CARPENTER.....	\$ 25.98	15.98

CARP0069-006 05/01/2017

COSHOCTON, HOLMES, KNOX & MORROW

	Rates	Fringes
CARPENTER.....	\$ 24.04	15.29

CARP0171-002 05/01/2019

BELMONT, COLUMBIANA, HARRISON, JEFFERSON & MONROE

	Rates	Fringes
CARPENTER.....	\$ 27.37	20.02

CARP0200-002 05/01/2023

ADAMS, ATHENS, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA,
GUERNSEY, HIGHLAND, HOCKING, JACKSON, LAWRENCE, LICKING,
MADISON, MARION, MEIGS, MORGAN, MUSKINGUM, NOBLE, PERRY,
PICKAWAY, PIKE, ROSS, SCIOTO, UNION, VINTON and WASHINGTON
COUNTIES

	Rates	Fringes
CARPENTER.....	\$ 32.42	21.42
Diver.....	\$ 39.41	10.40
PILEDRIVERMAN.....	\$ 32.42	21.42

CARP0248-005 07/01/2008

LUCAS & WOOD

	Rates	Fringes
CARPENTER.....	\$ 27.27	14.58

CARP0248-008 07/01/2008

	Rates	Fringes
CARPENTER DEFIANCE, FULTON, HANCOCK, HENRY, PAULDING & WILLIAMS COUNTIES.....	\$ 23.71	13.28

CARP0254-002 05/01/2017

ASHTABULA, CUYAHOGA, GEAUGA & LAKE

	Rates	Fringes
CARPENTER.....	\$ 32.40	16.97

CARP0372-002 05/01/2023

ALLEN, AUGLAIZE, HARDIN, MERCER, PUTNAM & VAN WERT

	Rates	Fringes
CARPENTER.....	\$ 28.85	24.59

CARP0639-003 05/01/2017

MEDINA, PORTAGE & SUMMIT

	Rates	Fringes
CARPENTER.....	\$ 30.42	16.99

CARP0735-002 05/01/2023

ASHLAND, ERIE, HURON, LORAIN & RICHLAND

	Rates	Fringes
CARPENTER.....	\$ 31.62	21.63

CARP1311-001 05/01/2017

BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE,
GREENE, HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY &
WARREN

	Rates	Fringes
Carpenter & Piledrivermen.....	\$ 29.34	15.95
Diver.....	\$ 40.58	9.69

CARP1393-002 07/01/2008

CRAWFORD, DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA,
PAULDING, SANDUSKY, SENECA, WILLIAMS & WOOD

Rates	Fringes
-------	---------

Piledrivermen & Diver's Tender...\$ 27.30 16.05

DIVERS - \$250.00 per day

CARP1393-003 07/01/2008

ALLEN, AUGLAIZE, HARDIN, MERCER, PUTNAM, VAN WERT & WYANDOT

Rates Fringes

Piledrivermen & Diver's Tender...\$ 25.15 15.92

DIVERS - \$250.00 per day

CARP1871-006 05/01/2017

BELMONT, HARRISON, & MONROE

Rates Fringes

Diver, Wet.....\$ 48.11 17.33

Piledrivermen; Diver, Dry.....\$ 32.07 17.33

CARP1871-008 05/01/2017

ASHLAND, ASHTABULA, CUYAHOGA, ERIE, GEAUGA, HURON, LAKE,
LORAIN, MEDINA, PORTAGE, RICHLAND & SUMMIT

Rates Fringes

Diver, Wet.....\$ 45.80 18.84

Piledrivermen; Diver, Dry.....\$ 30.53 18.84

CARP1871-014 05/01/2017

CARROLL, STARK, TUSCARAWAS & WAYNE

Rates Fringes

Diver, Wet.....\$ 38.34 16.95

Piledrivermen; Diver, Dry.....\$ 25.56 16.95

CARP1871-015 05/01/2017

COSHOCTON, HOLMES, KNOX & MORROW

Rates Fringes

Diver, Wet.....	\$ 37.34	16.07
Piledrivermen; Diver, Dry.....	\$ 24.89	16.07

 CARP1871-017 05/01/2017

MAHONING & TRUMBULL

	Rates	Fringes
Diver, Wet.....	\$ 40.65	17.62
Piledrivermen; Diver, Dry.....	\$ 27.10	17.62

 CARP2235-012 01/01/2014

COLUMBIANA & JEFFERSON

	Rates	Fringes
PILEDRIVERMAN.....	\$ 31.74	16.41

 CARP2239-001 07/01/2008

CRAWFORD, OTTAWA, SANDUSKY, SENECA & WYANDOT

	Rates	Fringes
CARPENTER.....	\$ 23.71	13.28

 ELEC0008-002 05/29/2023

DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING,
 PUTNAM, SANDUSKY, SENECA, WILLIAMS & WOOD

	Rates	Fringes
CABLE SPLICER.....	\$ 38.98	18.96
ELECTRICIAN.....	\$ 46.38	4.5%+21.96

 ELEC0032-003 12/04/2023

ALLEN, AUGLAIZE, HARDIN, LOGAN, MERCER, SHELBY, VAN WERT &
 WYANDOT (Crawford, Jackson, Marseilles, Mifflin, Ridgeland,
 Ridge & Salem Townships)

	Rates	Fringes
ELECTRICIAN.....	\$ 35.17	22.82

ELEC0038-002 04/24/2023

CUYAHOGA, GEAUGA (Bainbridge, Chester & Russell Townships) & LORAIN (Columbia Township)

	Rates	Fringes
ELECTRICIAN		
Excluding Sound & Communications Work.....	\$ 43.13	23.31

FOOTNOTES;

- a. 6 Paid Holidays: New Year's Day; Memorial Day; July 4th; Labor Day; Thanksgiving Day; & Christmas Day
- b. 1 week's paid vacation for 1 year's service; 2 weeks' paid vacation for 2 or more years' service

ELEC0038-008 04/24/2023

CUYAHOGA, GEAUGA (Bainbridge, Chester & Russell Townships) & LORAIN (Columbia Township)

	Rates	Fringes
Sound & Communication Technician		
Communications Technician...\$	29.80	13.80
Installer Technician.....\$	28.55	13.76

FOOTNOTES;

- a. 6 Paid Holidays: New Year's Day; Memorial Day; July 4th; Labor Day; Thanksgiving Day; & Christmas Day
- b. 1 week's paid vacation for 1 year's service; 2 weeks' paid vacation for 2 or more years' service

ELEC0064-003 11/27/2023

COLUMBIANA (Butler, Fairfield, Perry, Salem & Unity Townships) MAHONING (Austintown, Beaver, Berlin, Boardman, Canfield, Ellsworth, Coitsville, Goshen, Green, Jackson, Poland, Springfield & Youngstown Townships), & TRUMBULL (Hubbard & Liberty Townships)

Rates	Fringes
-------	---------

ELECTRICIAN.....\$ 37.90 20.08

 ELEC0071-001 01/01/2019

ASHLAND, CHAMPAIGN, CLARK, COSHOCTON, CRAWFORD, DELAWARE,
 FAIRFIELD, FAYETTE, FRANKLIN, GUERNSEY, HIGHLAND, HOCKING,
 JACKSON (Coal, Jackson, Liberty, Milton, Washington & Wellston
 Townships), KNOX, LICKING, MADISON, MARION, MONROE, MORGAN,
 MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE (Beaver,
 Benton, Jackson, Mifflin, Pebble, Peepee, Perry & Seal
 Townships), RICHLAND, ROSS, TUSCARAWAS (Auburn, Bucks, Clay,
 Jefferson, Oxford, Perry, Salem, Rush, Washington & York
 Townships), UNION, VINTON (Clinton, Eagle, Elk, Harrison,
 Jackson, Richland & Swan Townships), and WASHINGTON COUNTIES

	Rates	Fringes
Line Construction		
Equipment Operators.....\$	33.62	13.40
Groundmen.....\$	24.17	11.32
Linemen & Cable Splicers....\$	38.27	14.42

 ELEC0071-004 01/01/2019

AUGLAIZE, CLINTON, DARKE, GREENE, LOGAN, MERCER, MIAMI,
 MONTGOMERY, PREBLE, and SHELBY COUNTIES

	Rates	Fringes
Line Construction		
Equipment Operator.....\$	33.62	13.40
Groundman.....\$	24.17	11.32
Lineman & Cable Splicers....\$	38.27	14.42

 ELEC0071-005 12/31/2018

ASHTABULA, CUYAHOGA, GEAUGA, LAKE & LORAIN

	Rates	Fringes
LINE CONSTRUCTION: Equipment Operator		
DOT/Traffic Signal & Highway Lighting Projects...\$	32.44	14.10
Municipal Power/Transit Projects.....\$	40.10	16.42
LINE CONSTRUCTION: Groundman DOT/Traffic Signal &		

Highway Lighting Projects...\$ 25.06	12.26
Municipal Power/Transit Projects.....\$ 31.19	14.11
LINE CONSTRUCTION:	
Linemen/Cable Splicer	
DOT/Traffic Signal & Highway Lighting Projects...\$ 36.13	15.03
Municipal Power/Transit Projects.....\$ 44.56	17.58

ELEC0071-008 01/01/2019

COLUMBIANA, MAHONING, and TRUMBULL COUNTIES

	Rates	Fringes
Line Construction		
Equipment Operator.....\$ 33.62		13.40
Groundman.....\$ 24.17		11.32
Lineman & Cable Splicers....\$ 38.27		14.42

ELEC0071-010 01/01/2019

BELMONT, CARROLL, HARRISON, HOLMES, JEFFERSON, MEDINA, PORTAGE,
STARK, SUMMIT, and WAYNE COUNTIES

	Rates	Fringes
Line Construction		
Equipment Operator.....\$ 33.62		13.40
Groundman.....\$ 24.17		11.32
Lineman & Cable Splicers....\$ 38.27		14.42

ELEC0071-013 01/01/2019

BROWN, BUTLER, CLERMONT, HAMILTON, and WARREN COUNTIES

	Rates	Fringes
Line Construction		
Equipment Operator.....\$ 33.62		13.40
Groundman.....\$ 24.17		11.32
Lineman & Cable Splicers....\$ 38.27		14.42

ELEC0071-014 01/01/2019

ADAMS, ATHENS, GALLIA, JACKSON (Bloomfield, Franklin, Hamilton,
Lick, Jefferson, Scioto & Madison Townships), LAWRENCE, MEIGS,
PIKE (Camp Creek, Marion, Newton, Scioto, Sunfish & Union

Townships), SCIOTO & VINTON (Brown, Knox, Madison, Vinton & Wilkesville Townships)

	Rates	Fringes
Line Construction		
Equipment Operator.....	\$ 33.62	13.40
Groundman.....	\$ 24.17	11.32
Lineman & Cable Splicers....	\$ 38.27	14.42

 ELEC0082-002 12/04/2023

CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE & WARREN
 (Wayne, Clear Creek & Franklin Townships)

	Rates	Fringes
ELECTRICIAN.....	\$ 36.00	21.99

 * ELEC0082-006 11/28/2022

CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE & WARREN
 (Wayne, Clear Creek & Franklin Townships)

	Rates	Fringes
Sound & Communication Technician		
Cable Puller.....	\$ 13.10 **	4.76
Installer/Technician.....	\$ 26.20	13.89

 * ELEC0129-003 02/26/2024

LORAIN (Except Columbia Township) & MEDINA (Litchfield & Liverpool Townships)

	Rates	Fringes
ELECTRICIAN.....	\$ 41.40	18.36

 * ELEC0129-004 02/26/2024

ERIE & HURON (Lyme, Ridgefield, Norwalk, Townsend, Wakeman, Sherman, Peru, Bronson, Hartland, Clarksfield, Norwich, Greenfield, Fairfield, Fitchville & New London Townships)

	Rates	Fringes
ELECTRICIAN.....	\$ 41.40	18.36

 ELEC0141-003 06/01/2023

BELMONT COUNTY

	Rates	Fringes
CABLE SPLICER.....	\$ 30.63	25.87
ELECTRICIAN.....	\$ 35.70	28.87

 ELEC0212-003 11/26/2018

BROWN, CLERMONT & HAMILTON

	Rates	Fringes
Sound & Communication Technician.....	\$ 24.35	10.99

 ELEC0212-005 06/05/2023

BROWN, CLERMONT, and HAMILTON COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 34.41	21.55

 ELEC0245-001 08/29/2022

ALLEN, HARDIN, VAN WERT & WYANDOT (Crawford, Jackson,
 Marseilles, Mifflin, Richland, Ridge & Salem Townships)

	Rates	Fringes
Line Construction		
Equipment Operator.....	\$ 32.37	26.5%+7.25
Groundman Truck Driver.....	\$ 19.35	7.00+27.25%
Lineman.....	\$ 44.22	7.00+27.25%

FOOTNOTE: a. Half day's Paid Holiday: The last 4 hours of
 the workday prior to Christmas or New Year's Day

 ELEC0245-003 01/01/2024

DEFIANCE, FULTON, HANCOCK, HENRY, HURON, LUCAS, OTTAWA,
PAULDING, PUTNAM, SANDUSKY, SENECA, WILLIAMS, and WOOD COUNTIES

	Rates	Fringes
Line Construction		
Cable Splicer.....	\$ 52.53	7.75+27%
Groundman/Truck Driver.....	\$ 19.99	7.75+27%
Heli-arc Welding.....	\$ 45.98	7.75+27%
Lineman.....	\$ 45.68	7.75+27%
Operator - Class 1.....	\$ 36.54	7.75+27%
Operator - Class 2.....	\$ 31.98	7.75+27%
Traffic Signal & Lighting Technician.....	\$ 41.11	7.75+27%

FOOTNOTE: a. 6 Observed Holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; & Christmas Day. Employees who work on a holiday shall be paid at a rate of double their applicable classified straight-time rates for the work performed on such holiday.

ELEC0245-004 08/28/2023

ERIE COUNTY

	Rates	Fringes
Line Construction		
Cable Splicer.....	\$ 49.14	26.75%+6.75
Cablesplicer.....	\$ 52.76	27%+7.50
Groundman/Truck Driver.....	\$ 20.07	27%+7.50
Lineman.....	\$ 45.88	27%+7.50
Operator - Class 1.....	\$ 36.70	27%+7.50
Operator - Class 2.....	\$ 32.12	27%+7.50

FOOTNOTE: a. 6 Observed Holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Thanksgiving Day; & Christmas Day. Employees who work on a holiday shall be paid at a rate of double their applicable classified straight-time rates for the work performed on such holiday.

ELEC0246-001 10/30/2023

	Rates	Fringes
ELECTRICIAN.....	\$ 42.50	55%+13.88

FOOTNOTE: a. 1 1/2 Paid Holidays: The last scheduled workday prior to Christmas & 4 hours on Good Friday.

 ELEC0306-005 05/29/2023

MEDINA (Brunswick, Chatham, Granger, Guilford, Harrisville, Hinckley, Homer, Lafayette, Medina, Montville, Sharon, Spencer, Wadsworth, Westfield & York Townships), PORTAGE (Atwater, Aurora, Brimfield, Deerfield, Franklin, Mantua, Randolph, Ravenna, Rootstown, Shalersville, Streetsboro & Suffield Townships), SUMMIT & WAYNE (Baughman, Canaan, Chester, Chippewa, Congress, Green, Milton, & Wayne Townships)

	Rates	Fringes
CABLE SPLICER.....	\$ 36.87	16.56
ELECTRICIAN.....	\$ 40.15	5.25%+20.85

 ELEC0317-002 05/29/2023

GALLIA & LAWRENCE

	Rates	Fringes
CABLE SPLICER.....	\$ 32.68	18.13
ELECTRICIAN.....	\$ 37.15	28.48

 ELEC0540-005 01/01/2024

CARROLL (Northern half, including Fox, Harrison, Rose & Washington Townships), COLUMBIANA (Knox Township), HOLMES, MAHONING (Smith Township), STARK, TUSCARAWAS (North of Auburn, Clay, Rush & York Townships), and WAYNE (South of Baughman, Chester, Green & Wayne Townships) COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 36.96	28.18

 ELEC0573-003 11/27/2023

ASHTABULA (Colebrook, Wayne, Williamsfield, Orwell & Windsor Townships), GEAUGA (Auburn, Middlefield, Parkman & Troy Townships), MAHONING (Milton Township), PORTAGE (Charlestown, Edinburg, Freedom, Hiram, Nelson, Palmyra, Paris & Windham Townships), and TRUMBULL (Except Liberty & Hubbard Townships)

	Rates	Fringes
ELECTRICIAN.....	\$ 40.40	22.08

 ELEC0575-001 05/29/2023

ADAMS, FAYETTE, HIGHLAND, HOCKING, JACKSON (Bloomfield, Franklin, Hamilton, Jefferson, Lick, Madison, Scioto, Coal, Jackson, Liberty, Milton & Washington Townships), PICKAWAY (Deer Creek, Perry, Pickaway, Salt Creek & Wayne Townships), PIKE (Beaver, Benton, Jackson, Mifflin, Pebble, PeePee, Perry, Seal, Camp Creek, Newton, Scioto, Sunfish, Union & Marion Townships), ROSS, SCIOTO & VINTON (Clinton, Eagle, Elk, Harrison, Jackson, Richland & Swan Townships)

	Rates	Fringes
ELECTRICIAN.....	\$ 37.00	22.26

 ELEC0648-001 08/29/2023

BUTLER and WARREN COUNTIES (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union & Washington Townships)

	Rates	Fringes
CABLE SPLICER.....	\$ 30.50	18.23
ELECTRICIAN.....	\$ 34.00	21.98

 ELEC0673-004 01/01/2024

ASHTABULA (Excluding Orwell, Colebrook, Williamsfield, Wayne & Windsor Townships), GEAUGA (Burton, Chardon, Claridon, Hambden, Huntsburg, Montville, Munson, Newbury & Thompson Townships) and LAKE COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 33.81	21.47
ELECTRICIAN.....	\$ 37.38	23.75

 ELEC0683-002 05/29/2023

CHAMPAIGN, CLARK, DELAWARE, FAIRFIELD, FRANKLIN, MADISON, PICKAWAY (Circleville, Darby, Harrison, Jackson, Madison, Monroe, Muhlenberg, Scioto, Walnut & Washington Townships), and

UNION COUNTIES

	Rates	Fringes
CABLE SPLICER.....	\$ 38.75	24.19
ELECTRICIAN.....	\$ 37.75	24.16

 ELEC0688-003 05/30/2022

ASHLAND, CRAWFORD, HURON (Richmond, New Haven, Ripley & Greenwich Townships), KNOX (Liberty, Clinton, Union, Howard, Monroe, Middleberry, Morris, Wayne, Berlin, Pike, Brown & Jefferson Townships), MARION, MORROW, RICHLAND and WYANDOT (Sycamore, Crane, Eden, Pitt, Antrim & Tymochtee Townships) COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 32.30	21.83

 ELEC0972-002 06/01/2023

ATHENS, MEIGS, MONROE, MORGAN, NOBLE, VINTON (Brown, Knox, Madison, Vinton & Wilkesville Townships), and WASHINGTON COUNITES

	Rates	Fringes
CABLE SPLICER.....	\$ 35.70	30.26
ELECTRICIAN.....	\$ 35.45	30.25

 ELEC1105-001 05/29/2023

COSHOCTON, GUERNSEY, KNOX (Jackson, Clay, Morgan, Miller, Milford, Hilliar, Butler, Harrison, Pleasant & College Townships), LICKING, MUSKINGUM, PERRY, and TUSCARAWAS (Auburn, York, Clay, Jefferson, Rush, Oxford, Washington, Salem, Perry & Bucks Townships) COUNTIES

	Rates	Fringes
ELECTRICIAN.....	\$ 36.45	24.22

 ENGI0018-003 05/01/2019

ASHTABULA, CUYAHOGA, ERIE, GEAUGA, LAKE, LORAIN, MEDINA,

PORTAGE, and SUMMIT COUNTIES

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 38.63	15.20
GROUP 2.....	\$ 38.53	15.20
GROUP 3.....	\$ 37.49	15.20
GROUP 4.....	\$ 36.27	15.20
GROUP 5.....	\$ 30.98	15.20
GROUP 6.....	\$ 38.88	15.20
GROUP 7.....	\$ 39.13	15.20

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - Air Compressor on Steel Erection; Barrier Moving Machine; Boiler Operator on Compressor or Generator when mounted on a Rig; Cableway; Combination Concrete Mixer & Tower; Concrete Plant (over 4 yd. Capacity); Concrete Pump; Crane (All Types, Including Boom Truck, Cherry Picker); Crane-Compact, Track or Rubber over 4,000 lbs. capacity; Cranes-Self Erecting, Stationary, Track or Truck (All Configurations); Derrick; Dragline; Dredge (Dipper, Clam or Suction); Elevating Grader or Euclid Loader; Floating Equipment (All Types); Gradall; Helicopter Crew (Operator-Hoist or Winch); Hoe (all types); Hoisting Engine on Shaft or Tunnel Work; Hydraulic Gantry (Lifting System); Industrial-Type Tractor; Jet Engine Dryer (D8 or D9) Diesel Tractor; Locomotive (Standard Gauge); Maintenance Operator Class A; Mixer, Paving (Single or Double Drum); Mucking Machine; Multiple Scraper; Piledriving Machine (All Types); Power Shovel; Prentice Loader; Quad 9 (Double Pusher); Rail Tamper (with auto lifting & aligning device); Refrigerating Machine (Freezer Operation); Rotary Drill, on Caisson work; Rough Terrain Fork Lift with Winch/Hoist; Side-Boom; Slip-Form Paver; Tower Derrick; Tree Shredder; Trench Machine (Over 24" wide); Truck Mounted Concrete Pump; Tug Boat; Tunnel Machine and/or Mining Machine; Wheel Excavator; and Asphalt Plant Engineer (Cleveland District Only).

GROUP 2 - Asphalt Paver; Automatic Subgrader Machine, Self-Propelled (CMI Type); Bobcat Type and/or Skid Steer Loader with Hoe Attachment Greater than 7,000 lbs.; Boring Machine More than 48"; Bulldozer; Endloader; Horizontal Directional Drill (Over 50,000 ft lbs thrust); Hydro Milling Machine; Kolman-type Loader (production type-Dirt); Lead Greaseman; Lighting & Traffic Signal Installation Equipment (includes all groups or classifications);

Material Transfer Equipment (Shuttle Buggy) Asphalt; Pettibone-Rail Equipment; Power Grader; Power Scraper; Push Cat; Rotomill (all), Grinders & Planers of All types; Trench Machine (24" wide & under); Vermeer type Concrete Saw; and Maintenance Operators (Portage and Summit Counties Only).

GROUP 3 - A-Frame; Air Compressor on Tunnel Work (low pressure); Asphalt Plant Engineer (Portage and Summit Counties Only); Bobcat-type and/or Skid Steer Loader with or without Attachments; Highway Drills (all types); Locomotive (narrow gauge); Material Hoist/Elevator; Mixer, Concrete (more than one bag capacity); Mixer, one bag capacity (Side Loader); Power Boiler (Over 15 lbs. Pressure) Pump Operator installing & operating Well Points; Pump (4" & over discharge); Roller, Asphalt; Rotovator (lime soil stabilizer); Switch & Tie Tampers (without lifting & aligning device); Utility Operator (Small equipment); Welding Machines; and Railroad Tie Inserter/Remover; Articulating/straight bed end dumps if assigned (minus \$4.00 per hour).

GROUP 4 - Backfiller; Ballast Re-locator; Bars, Joint & Mesh Installing Machine; Batch Plant; Boring Machine Operator (48" or less); Bull Floats; Burlap & Curing Machine; Concrete Plant (capacity 4 yd. & under); Concrete Saw (Multiple); Conveyor (Highway); Crusher; Deckhand; Farm-type Tractor with attachments (highway); Finishing Machine; Fireperson, Floating Equipment (all types); Forklift; Form Trencher; Hydro Hammer except masonry; Hydro Seeder; Pavement Breaker; Plant Mixer; Post Driver; Post Hole Digger (Power Auger); Power Brush Burner; Power Form Handling Equipment; Road Widening Trencher; Roller (Brick, Grade & Macadam); Self-Propelled Power Spreader; Self-Propelled Power Subgrader; Steam Fireperson; Tractor (Pulling Sheepfoot, Roller or Grader); and Vibratory Compactor with Integral Power.

GROUP 5 - Compressor (Portable, Sewer, Heavy & Highway); Drum Fireperson (Asphalt Plant); Generator; Masonry Fork Lift; Inboard-Outboard Motor Boat Launch; Oil Heater (asphalt plant); Oiler/Helper; Power Driven Heater; Power Sweeper & Scrubber; Pump (under 4" discharge); Signalperson; Tire Repairperson; VAC/ALLS; Cranes - Compact, track or rubber under 4,000 pound capacity; fueling and greasing; and Chainmen.

GROUP 6 - Master Mechanic & Boom from 150 to 180.

GROUP 7 - Boom from 180 and over.

ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN,
BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON,
COSHOCOTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD,
FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON,
HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES,
HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN,
LUCAS, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE,
MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING,
PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, RICHLAND, ROSS,
SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, TUSCARAWAS, UNION, VAN
WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, and
YANDOT COUNTIES

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
GROUP 1.....	\$ 37.14	15.20
GROUP 2.....	\$ 37.02	15.20
GROUP 3.....	\$ 35.98	15.20
GROUP 4.....	\$ 34.80	15.20
GROUP 5.....	\$ 29.34	15.20
GROUP 6.....	\$ 37.39	15.20
GROUP 7.....	\$ 37.64	15.20

OPERATING ENGINEER CLASSIFICATIONS

GROUP 1 - Air Compressor on Steel Erection; Barrier Moving Machine; Boiler Operator on Compressor or Generator when mounted on a Rig; Cableway; Combination Concrete Mixer & Tower; Concrete Plant (over 4 yd. Capacity); Concrete Pump; Crane (All Types, Including Boom Truck, Cherry Picker); Crane-Compact, Track or Rubber over 4,000 lbs. capacity; Cranes-Self Erecting, Stationary, Track or Truck (All Configurations); Derrick; Dragline; Dredge (Dipper, Clam or Suction); Elevating Grader or Euclid Loader; Floating Equipment (All Types); Gradall; Helicopter Crew (Operator-Hoist or Winch); Hoe (all types); Hoisting Engine on Shaft or Tunnel Work; Hydraulic Gantry (Lifting System); Industrial-Type Tractor; Jet Engine Dryer (D8 or D9) Diesel Tractor; Locomotive (Standard Gauge); Maintenance Operator Class A; Mixer, Paving (Single or Double Drum); Mucking Machine; Multiple Scraper; Piledriving Machine (All Types); Power Shovel; Prentice Loader; Quad 9 (Double Pusher); Rail Tamper (with auto lifting & aligning device); Refrigerating Machine (Freezer

Operation); Rotary Drill, on Caisson work; Rough Terrain Fork Lift with Winch/Hoist; Side-Boom; Slip-Form Paver; Tower Derrick; Tree Shredder; Trench Machine (Over 24" wide); Truck Mounted Concrete Pump; Tug Boat; Tunnel Machine and/or Mining Machine; and Wheel Excavator.

GROUP 2 - Asphalt Paver; Automatic Subgrader Machine, Self-Propelled (CMI Type); Bobcat Type and/or Skid Steer Loader with Hoe Attachment Greater than 7,000 lbs.; Boring Machine More than 48"; Bulldozer; Endloader; Hydro Milling Machine; Horizontal Directional Drill (over 50,000 ft. lbs. thrust); Kolman-type Loader (production type-Dirt); Lead Greaseman; Lighting & Traffic Signal Installation Equipment (includes all groups or classifications); Material Transfer Equipment (Shuttle Buggy) Asphalt; Pettibone-Rail Equipment; Power Grader; Power Scraper; Push Cat; Rotomill (all), Grinders & Planers of All types; Trench Machine (24" wide & under); and Vermeer type Concrete Saw.

GROUP 3 - A-Frame; Air Compressor on Tunnel Work (low pressure); Asphalt Plant Engineer; Bobcat-type and/or Skid Steer Loader with or without Attachments; Highway Drills (all types); Locomotive (narrow gauge); Material Hoist/Elevator; Mixer, Concrete (more than one bag capacity); Mixer, one bag capacity (Side Loader); Power Boiler (Over 15 lbs. Pressure) Pump Operator installing & operating Well Points; Pump (4" & over discharge); Railroad Tie Inserter/Remover; Roller, Asphalt; Rotovator (lime soil stabilizer); Switch & Tie Tampers (without lifting & aligning device); Utility Operator (Small equipment); and Welding Machines; Articulating/straight bed end dumps if assigned (minus \$4.00 per hour).

GROUP 4 - Backfiller; Ballast Re-locator; Bars, Joint & Mesh Installing Machine; Batch Plant; Boring Machine Operator (48" or less); Bull Floats; Burlap & Curing Machine; Concrete Plant (capacity 4 yd. & under); Concrete Saw (Multiple); Conveyor (Highway); Crusher; Deckhand; Farm-type Tractor with attachments (highway); Finishing Machine; Fireperson, Floating Equipment (all types); Fork Lift; Form Trencher; Hydro Hammer expect masonry; Hydro Seeder; Pavement Breaker; Plant Mixer; Post Driver; Post Hole Digger (Power Auger); Power Brush Burner; Power Form Handling Equipment; Road Widening Trencher; Roller (Brick, Grade & Macadam); Self-Propelled Power Spreader; Self-Propelled Power Subgrader; Steam Fireperson; Tractor (Pulling Sheepfoot, Roller or Grader); and Vibratory Compactor with Integral Power.

GROUP 5 - Compressor (Portable, Sewer, Heavy & Highway); Drum

Fireperson (Asphalt Plant); Generator; Masonary Forklift; Inboard-Outboard Motor Boat Launch; Oil Heater (asphalt plant); Oiler/Helper; Power Driven Heater; Power Sweeper & Scrubber; Pump (under 4" discharge); Signalperson; Tire Repairperson; VAC/ALLS; Cranes - Compact, track or rubber under 4,000 pound capacity; fueling and greasing; and Chainmen.

GROUP 6 - Master Mechanic & Boom from 150 to 180.

GROUP 7 - Boom from 180 and over.

 ENGI0066-023 06/01/2017

COLUMBIANA, MAHONING & TRUMBULL COUNTIES

	Rates	Fringes
POWER EQUIPMENT OPERATOR		
ASBESTOS; HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 1 - A & B.....	\$ 39.23	19.66
ASBESTOS; HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 2 - A & B.....	\$ 38.90	19.66
ASBESTOS; HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 3 - A & B.....	\$ 34.64	19.66
ASBESTOS; HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 4 - A & B.....	\$ 30.70	19.66
ASBESTOS; HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 5 - A & B.....	\$ 27.30	19.66
HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 1 - C & D.....	\$ 35.96	19.66
HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 2 - C & D.....	\$ 35.66	19.66
HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 3 - C & D.....	\$ 31.76	19.66
HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 4 - C & D.....	\$ 28.14	19.66
HAZARDOUS/TOXIC WASTE PROJECTS		
GROUP 5 - C & D.....	\$ 25.03	19.66

ALL OTHER WORK		
GROUP 1.....	\$ 32.69	19.66
ALL OTHER WORK		
GROUP 2.....	\$ 32.42	19.66
ALL OTHER WORK		
GROUP 3.....	\$ 28.87	19.66
ALL OTHER WORK		
GROUP 4.....	\$ 25.58	19.66
ALL OTHER WORK		
GROUP 5.....	\$ 22.75	19.66

GROUP 1 - Rig, Pile Driver or Caisson Type; & Rig, Pile Hydraulic Unit Attached

GROUP 2 - Asphalt Heater Planer; Backfiller with Drag Attachment; Backhoe; Backhoe with Shear attached; Backhoe-Rear Pivotal Swing; Batch Plant-Central Mix Concrete; Batch Plant, Portable concrete; Berm Builder-Automatic; Boat Derrick; Boat-Tug; Boring Machine Attached to Tractor; Bullclam; Bulldozer; C.M.I. Road Builder & Similar Type; Cable Placer & Layer; Carrier-Straddle; Carryall-Scraper or Scoop; Chicago Boom; Compactor with Blade Attached; Concrete Saw (Vermeer or similar type); Concrete Spreader Finisher; Combination, Bidwell Machine; Crane; Crane-Electric Overhead; Crane-Rough Terrain; Crane-Side Boom; Crane-Truck; Crane-Tower; Derrick-Boom; Derrick-Car; Digger-Wheel (Not trencher or road widener); Double Nine; Drag Line; Dredge; Drill-Kenny or Similar Type; Easy Pour Median Barrier Machine (or similar type); Electromatic; Frankie Pile; Gradall; Grader; Gurry; Self-Propelled; Heavy Equipment Robotics Operator/Mechanic; Hoist-Monorail; Hoist-Stationary & Mobile Tractor; Hoist, 2 or 3 drum; Horizontal Directional Drill Operator; Jackall; Jumbo Machine; Kocal & Kuhlman; Land-Seagoing Vehicle; Loader, Elevating; Loader, Front End; Loader, Skid Steer; Locomotive; Mechanic/Welder; Metro Chip Harvester with Boom; Mucking Machine; Paver-Asphalt Finishing Machine; Paver-Road Concrete; Paver-Slip Form (C.M.I. or similar); Place Crete Machine with Boom; Post Driver (Carrier mounted); Power Driven Hydraulic Pump & Jack (When used in Slip Form or Lift Slab Construction); Pump Crete Machine; Regulator-Ballast; Hydraulic Power Unit not attached to Rig for Pile Drillings; Rigs-Drilling; Roto Mill or similar Full Lane (8' Wide & Over); Roto Mill or similar type (Under 8'); Shovel; Slip Form Curb Machine; Speedwing; Spikemaster; Stonecrusher; Tie Puller & Loader; Tie Tamper; Tractor-Double Boom; Tractor with Attachments; Truck-Boom; Truck-Tire; Trench Machine; Tunnel Machine (Mark 21 Java or similar); & Whirley (or similar type)

GROUP 3 - Asphalt Plant; Bending Machine (Pipeline or similar type); Boring machine, Motor Driven; Chip Harvester without Boom; Cleaning Machine, Pipeline Type; Coating Machine, Pipeline Type; Compactor; Concrete Belt Placer; Concrete Finisher; Concrete Planer or Asphalt; Concrete Spreader; Elevator; Fork Lift (Home building only); Fork lift & Lulls; Fork Lift Walk Behind (Hoisting over 1 buck high); Form Line Machine; Grease Truck operator; Grout Pump; Gunnite Machine; Horizontal Directional Drill Locator; Single Drum Hoist with or without Tower; Huck Bolting Machine; Hydraulic Scaffold (Hoisting building materials); Paving Breaker (Self-propelled or Ridden); Pipe Dream; Pot Fireperson (Power Agitated); Refrigeration Plant; Road Widener; Roller; Sasgen Derrick; Seeding Machine; Soil Stabilizer (Pump type); Spray Cure Machine, Self-Propelled; Straw Blower Machine; Sub-Grader; Tube Finisher or Broom C.M.I. or similar type; & Tugger Hoist

GROUP 4 - Air Curtain Destructor & Similar Type; Batch Plant-Job Related; Boiler Operator; Compressor; Conveyor; Curb Builder, self-propelled; Drill Wagon; Generator Set; Generator-Steam; Heater-Portable Power; Hydraulic Manipulator Crane; Jack-Hydraulic Power driven; Jack-Hydraulic (Railroad); Ladavator; Minor Machine Operator; Mixer-Concrete; Mulching Machine; Pin Puller; Power Broom; Pulverizer; Pump; Road Finishing Machine (Pull Type); Saw-Concrete-Self-Propelled (Highway Work); Signal Person; Spray Cure Machine-Motor Powered; Stump Cutter; Tractor; Trencher Form; Water Blaster; Steam Jenny; Syphon; Vibrator-Gasoline; & Welding Machine

GROUP 5 - Brakeperson; Fireperson; & Oiler

IRON0017-002 05/01/2023

ASHTABULA (North of Route 6, starting at the Geauga County Line, proceeding east to State Route 45), CUYAHOGA, ERIE (Eastern 2/3), GEAUGA, HURON (East of a line drawn from the north border through Monroeville & Willard), LAKE, LORAIN, MEDINA (North of Old Rte. #224), PORTAGE (West of a line from Middlefield to Shalersville to Deerfield), and SUMMIT (North of Old Rte. #224, including city limits of Barberton) COUNTIES

Rates Fringes

IRONWORKER

Ornamental, Reinforcing, &

Structural.....\$ 35.83 28.01

IRON0017-010 05/01/2023

ASHTABULA (Eastern part from Lake Erie on the north to route #322 on the south to include Conneaut, Kingsville, Sheffield, Denmark, Dorset, Cherry Valley, Wayne, Monroe, Pierpont, Richmond, Andover & Williamsfield Townships)

Rates Fringes

IRONWORKER

Structural, including metal building erection & Reinforcing.....\$ 35.83 28.01

IRON0044-001 06/01/2022

ADAMS (Western Part), BROWN, BUTLER (Southern Part), CLERMONT, CLINTON (South of a line drawn from Blanchester to Lynchburg), HAMILTON, HIGHLAND (Excluding eastern one-fifth & portion of county inside lines drawn from Marshall to Lynchburg from the northern county line through E. Monroe to Marshall) and WARREN (South of a line drawn from Blanchester through Morrow to the west county line) COUNTIES

Rates Fringes

IRONWORKER, REINFORCING.....\$ 32.37 22.30
Beyond 30-mile radius of Hamilton County Courthouse..\$ 28.67 21.20
Up to & including 30-mile radius of Hamilton County Courthouse.....\$ 27.60 20.70

IRON0044-002 06/01/2023

CLINTON (South of a line drawn from Blanchester to Lynchburg), HAMILTON, HIGHLAND (Excluding eastern one-fifth & portion of county inside lines drawn from Marshall to Lynchburg from the northern county line through E. Monroe to Marshall) & WARREN (South of a line drawn from Blanchester through Morrow to the west county line)

Rates Fringes

IRONWORKER

Fence Erector.....	\$ 30.75	23.30
Ornamental; Structural.....	\$ 32.37	23.30

 IRON0055-003 07/01/2023

CRAWFORD (Area Between lines drawn from where Hwy #598 & #30 meet through N. Liberty to the northern border & from said Hwy junction point due west to the border), DEFIANCE (S. of a line drawn from where Rte. #66 meets the northern line through Independence to the eastern county border), ERIE (Western 1/3), FULTON, HANCOCK, HARDIN (North of a line drawn from Maysville to a point 4 miles south of the northern line on the eastern line), HENRY, HURON (West of a line drawn from the northern border through Monroeville & Willard), LUCAS, OTTAWA, PUTNAM (East of a line drawn from the northern border down through Miller City to where #696 meets the southern border), SANDUSKY, SENECA, WILLIAMS (East of a line drawn from Pioneer through Stryker to the southern border), WOOD & WYANDOT (North of Rte. #30)

	Rates	Fringes
IRONWORKER		
Fence Erector.....	\$ 25.40	23.87
Flat Road Mesh.....	\$ 29.77	21.30
Tunnels & Caissons Under Pressure.....	\$ 29.77	21.30
All Other Work.....	\$ 34.25	28.20

 IRON0147-002 06/01/2023

ALLEN (Northern half), DEFIANCE (Northern part, excluding south of a line drawn from where Rte. #66 meets the northern line through Independence to the eastern county border), MERCER (Northern half), PAULDING, PUTNAM (Western part, excluding east of a line drawn from the northern border down through Miller City to where #696 meets the southern border), VAN WERT, and WILLIAMS (Western part, excluding east of a line drawn from Pioneer through Stryker to the southern border) COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.00	25.59

 IRON0172-002 06/01/2023

CHAMPAIGN (Eastern one-third), CLARK (Eastern one-fourth), COSHOCTON (West of a line beginning at the northwestern county

line going through Walhonding & Tunnel Hill to the southern county line), CRAWFORD (South of Rte. #30), DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, HARDIN (Excluding a line drawn from Roundhead to Maysville), HIGHLAND (Eastern one-fifth), HOCKING, JACKSON (Northern half), KNOX, LICKING, LOGAN (Eastern one-third), MADISON, MARION, MORROW, MUSKINGUM (West of a line starting at Adams Mill going to Adamsville & going from Adamsville through Blue Rock to the southern border), PERRY, PICKAWAY, PIKE (Northern half), ROSS, UNION, VINTON and WYANDOT (South of Rte. #30) COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 34.07	22.55

 IRON0207-004 06/01/2023

ASHTABULA (Southern part starting at the Geauga County line), COLUMBIANA (E. of a line from Damascus to Highlandtown), MAHONING (N. of Old Route #224), PORTAGE (E. of a line from Middlefield to Shalersville to Deerfield) & TRUMBULL

	Rates	Fringes
IRONWORKER		
Layout; Sheeter.....	\$ 34.00	27.16
Ornamental; Reinforcing;		
Structural.....	\$ 33.00	27.16
Ornamental; Reinforcing.....	\$ 28.92	25.61

 IRON0290-002 06/01/2023

ALLEN (Southern half), AUGLAIZE, BUTLER (North of a line drawn from east to the west county line going through Oxford, Darrrtown & Woodsdale), CHAMPAIGN (Excluding east of a line drawn from Catawla to the point where #68 intersects the northern county line), CLARK (Western two-thirds), CLINTON (Excluding south of a line drawn from Blanchester to Lynchburg), DARKE, GREENE, HIGHLAND (Inside lines drawn from Marshall to Lynchburg & from the northern county line through East Monroe to Marshall), LOGAN (West of a line drawn from West Liberty to where the northern county line meets the western county line of Hardin), MERCER (Southern half), MIAMI, MONTGOMERY, PREBLE, SHELBY & WARREN (Excluding south of a line drawn from Blanchester through Morrow to the western county line) COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 32.69	24.05

 IRON0549-003 12/01/2022

BELMONT, GUERNSEY, HARRISON, JEFFERSON, MONROE & MUSKINGUM
 (Excluding portion west of a line starting at Adams Mill going
 to Adamsville and going from Adamsville through Blue Rock to
 the south border)

	Rates	Fringes
IRONWORKER.....	\$ 35.19	25.66

 IRON0550-004 05/01/2023

ASHLAND, CARROLL, COLUMBIANA (W. of a line from Damascus to
 Highlandtown), COSHOCTON (E. of a line beginning at NW Co. line
 going through Walhonding & Tunnel Hill to the South Co. line),
 HOLMES, HURON (S. of Old Rte. #224), MAHONING (S. of Old Rte.
 #224), MEDINA (S. of Old Rte. #224), PORTAGE (S. of Old Rte.
 #224), RICHLAND, STARK, SUMMIT (S. of Old Rte. #224, Excluding
 city limits of Barberton), TUSCARAWAS, & WAYNE

	Rates	Fringes
Ironworkers:Structural, Ornamental and Reinforcing.....	\$ 33.00	22.27

 IRON0769-004 06/01/2023

ADAMS (Eastern Half), GALLIA, JACKSON (Southern Half), LAWRENCE
 & SCIOTO

	Rates	Fringes
IRONWORKER.....	\$ 36.16	28.34

 IRON0787-003 12/01/2023

ATHENS, MEIGS, MORGAN, NOBLE, and WASHINGTON COUNTIES

	Rates	Fringes
IRONWORKER.....	\$ 33.30	23.95

	Rates	Fringes
LABORER		
ASHTABULA, ERIE, HURON, LORAIN, LUCAS, MAHONING, MEDINA, OTTAWA, PORTAGE, SANDUSKY, STARK, SUMMIT, TRUMBULL & WOOD COUNTIES		
GROUP 1.....	\$ 35.05	13.70
GROUP 2.....	\$ 35.22	13.70
GROUP 3.....	\$ 35.55	13.70
GROUP 4.....	\$ 36.00	13.70
CUYAHOGA AND GEAUGA COUNTIES ONLY: SEWAGE PLANTS, WASTE PLANTS, WATER TREATMENT FACILITIES, PUMPING STATIONS, & ETHANOL PLANTS		
CONSTRUCTION.....	\$ 37.66	13.70
CUYAHOGA, GEAUGA & LAKE COUNTIES		
GROUP 1.....	\$ 36.28	13.70
GROUP 2.....	\$ 36.45	13.70
GROUP 3.....	\$ 36.78	13.70
GROUP 4.....	\$ 37.23	13.70
REMAINING COUNTIES OF OHIO		
GROUP 1.....	\$ 34.62	13.70
GROUP 2.....	\$ 34.79	13.70
GROUP 3.....	\$ 35.12	13.70
GROUP 4.....	\$ 35.57	13.70

LABORER CLASSIFICATIONS

GROUP 1 - Asphalt Laborer; Carpenter Tender; Concrete Curing Applicator; Dump Man (Batch Truck); Guardrail and Fence Installer; Joint Setter; Laborer (Construction); Landscape Laborer; Mesh Handlers & Placer; Right-of-way Laborer; Riprap Laborer & Grouter; Scaffold Erector; Seal Coating; Surface Treatment or Road Mix Laborer; Sign Installer; Slurry Seal; Utility Man; Bridge Man; Handyman; Waterproofing Laborer; Flagperson; Hazardous Waste (level D); Diver Tender; Zone Person & Traffic Control

GROUP 2 - Asphalt Raker; Concrete Puddler; Kettle Man Pipeline); Machine Driven Tools (Gas, Electric, Air); Mason Tender; Brick Paver; Mortar Mixer; Power Buggy or Power Wheelbarrow; Paint Striper; Sheeting & Shoring Man; Surface Grinder Man; Plastic Fusing Machine Operator; Pug Mill

Operator; & Vacuum Devices (wet or dry); Rodding Machine Operator; Diver; Screwman or Paver; Screed Person; Water Blast, Hand Held Wand; Pumps 4" & Under (Gas, Air or Electric) & Hazardous Waste (level C); Air Track and Wagon Drill; Bottom Person; Cofferdam (below 25 ft. deep); Concrete Saw Person; Cutting with Burning Torch; Form Setter; Hand Spiker (Railroad); Pipelayer; Tunnel Laborer (without air) & Caisson; Underground Person (working in Sewer and Waterline, Cleaning, Repairing & Reconditioning); Sandblaster Nozzle Person; & Hazardous Waste (level B)

GROUP 3 - Blaster; Mucker; Powder Person; Top Lander; Wrencher (Mechanical Joints & Utility Pipeline); Yarnner; Hazardous Waste (level A); Concrete Specialist; Concrete Crew in Tunnels (With Air-pressurized - \$1.00 premium); Curb Setter & Cutter; Grade Checker; Utility Pipeline Tapper; Waterline; and Caulker

GROUP 4 - Miner (With Air-pressurized - \$1.00 premium); & Gunite Nozzle Person

TUNNEL LABORER WITH AIR-PRESSURIZED ADD \$1.00 TO BASE RATE

SIGNAL PERSON WILL RECEIVE THE RATE EQUAL TO THE RATE PAID THE LABORER CLASSIFICATION FOR WHICH HE OR SHE IS SIGNALING.

 PAIN0006-002 05/01/2023

ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN, PORTAGE (N. of the East-West Turnpike) & SUMMIT (N. of the East-West Turnpike)

	Rates	Fringes
PAINTER		
COMMERCIAL NEW WORK;		
REMODELING; & RENOVATIONS		
GROUP 1.....	\$ 30.75	18.95
GROUP 2.....	\$ 31.15	18.95
GROUP 3.....	\$ 31.45	18.95
GROUP 4.....	\$ 37.01	18.95
COMMERCIAL REPAINT		
GROUP 1.....	\$ 29.25	18.95
GROUP 2.....	\$ 29.65	18.95
GROUP 3.....	\$ 29.95	18.95

PAINTER CLASSIFICATIONS - COMMERCIAL NEW WORK; REMODELING; & RENOVATIONS

GROUP 1 - Brush; & Roller

GROUP 2 - Sandblasting & Buffing

GROUP 3 - Spray Painting; Closed Steel Above 55 feet; Bridges & Open Structural Steel; Tanks - Water Towers; Bridge Painters; Bridge Riggers; Containment Builders

GROUP 4 - Bridge Blaster

PAINTER CLASSIFICATIONS - COMMERCIAL REPAINT

GROUP 1 - Brush; & Roller

GROUP 2 - Sandblasting & Buffing

GROUP 3 - Spray Painting

PAIN007-002 07/01/2023

FULTON, HENRY, LUCAS, OTTAWA (Excluding Allen, Bay, Bono, Catawba Island, Clay Center, Curtice, Danbury, Eagle Beach, Elliston, Elmore, Erie, Fishback, Gem Beach & Genova) & WOOD

Rates Fringes

PAINTER

NEW COMMERCIAL WORK

GROUP 1.....	\$ 28.59	20.04
GROUP 2.....	\$ 29.59	20.04
GROUP 3.....	\$ 29.59	20.04
GROUP 4.....	\$ 29.59	20.04
GROUP 5.....	\$ 29.59	20.04
GROUP 6.....	\$ 29.59	20.04
GROUP 7.....	\$ 29.59	20.04
GROUP 8.....	\$ 29.59	20.04
GROUP 9.....	\$ 29.59	20.04

REPAINT IS 90% OF JR

PAINTER CLASSIFICATIONS

GROUP 1 - Brush; Spray & Sandblasting Pot Tender

GROUP 2 - Refineries & Refinery Tanks; Surfaces 30 ft. or over where material is applied to or labor performed on above ground level (exterior), floor level (interior)

GROUP 3 - Swing Stage & Chair

GROUP 4 - Lead Abatement

GROUP 5 - All Methods of Spray

GROUP 6 - Solvent-Based Catalized Epoxy Materials of 2 or More Component Materials, to include Solvent-Based Conversion Varnish (excluding water based)

GROUP 7 - Spray Solvent Based Material; Sand & Abrasive Blasting

GROUP 8 - Towers; Tanks; Bridges; Stacks Over 30 Feet

GROUP 9 - Epoxy Spray (excluding water based)

PAIN0012-008 05/01/2019

BUTLER COUNTY

	Rates	Fringes
PAINTER		
GROUP 1.....	\$ 21.95	10.20
GROUP 2.....	\$ 25.30	10.20
GROUP 3.....	\$ 25.80	10.20
GROUP 4.....	\$ 26.05	10.20
GROUP 5.....	\$ 26.30	10.20

PAINTER CLASSIFICATIONS

GROUP 1: Bridge Equipment Tender; Bridge/Containment Builder

GROUP 2: Brush & Roller

GROUP 3: Spray

GROUP 4: Sandblasting; & Waterblasting

GROUP 5: Elevated Tanks; Steeplejack Work; Bridge; & Lead Abatement

PAIN0012-010 05/01/2019

BROWN, CLERMONT, CLINTON, HAMILTON & WARREN

	Rates	Fringes
PAINTER		
HEAVY & HIGHWAY BRIDGES- GUARDRAILS-LIGHTPOLES- STRIPING		
Bridge Equipment Tender and Containment Builder....	\$ 21.95	10.20
Bridges when highest point of clearance is 60 feet or more; & Lead Abatement Projects.....	\$ 26.30	10.20
Brush & Roller.....	\$ 25.30	10.20
Sandblasting & Hopper Tender; Water Blasting.....	\$ 26.05	10.20
Spray.....	\$ 25.80	10.20

PAIN0093-001 12/01/2023

ATHENS, GUERNSEY, HOCKING, MONROE, MORGAN, NOBLE and
WASHINGTON COUNTIES

	Rates	Fringes
PAINTER		
Bridges; Locks; Dams; Tension Towers; & Energized Substations.....	\$ 35.45	23.69
Power Generating Facilities.	\$ 32.30	23.69

PAIN0249-002 05/01/2023

CLARK, DARKE, GREENE, MIAMI, MONTGOMERY & PREBLE

	Rates	Fringes
PAINTER		
GROUP 1 - Brush & Roller....	\$ 26.23	12.56
GROUP 2 - Swing, Scaffold Bridges; Structural Steel; Open Acid Tank; High Tension Electrical Equipment; & Hot Pipes.....	\$ 26.23	12.56
GROUP 3 - Spray; Sandblast; Steamclean; Lead Abatement.....	\$ 26.98	12.56
GROUP 4 - Steeplejack Work..	\$ 27.18	12.56
GROUP 5 - Coal Tar.....	\$ 27.73	12.56
GROUP 6 - Bridge Equipment		

Tender & or Containment Builder.....	\$ 34.94	12.56
GROUP 7 - Tanks, Stacks & Towers.....	\$ 29.87	12.56
GROUP 8 - Bridge Blaster, Rigger.....	\$ 37.94	12.56

PAIN0356-002 09/01/2009

KNOX, LICKING, MUSKINGUM, and PERRY

	Rates	Fringes
PAINTER		
Bridge Equipment Tenders and Containment Builders....	\$ 27.93	7.25
Bridges; Blasters; and Riggers.....	\$ 34.60	7.25
Brush and Roller.....	\$ 20.93	7.25
Sandblasting; Steam Cleaning; Waterblasting; and Hazardous Work.....	\$ 25.82	7.25
Spray.....	\$ 21.40	7.25
Structural Steel and Swing Stage.....	\$ 25.42	7.25
Tanks; Stacks; and Towers...	\$ 28.63	7.25

PAIN0438-002 12/01/2023

BELMONT, HARRISON and JEFFERSON COUNTIES

	Rates	Fringes
PAINTER		
Bridges, Locks, Dams, Tension Towers & Energized Substations.....	\$ 36.09	19.49
Power Generating Facilities.	\$ 32.94	19.49

PAIN0476-001 06/01/2023

COLUMBIANA, MAHONING, and TRUMBULL COUNTIES

	Rates	Fringes
PAINTER		
GROUP 1.....	\$ 27.49	17.06
GROUP 2.....	\$ 34.12	17.06
GROUP 3.....	\$ 27.70	17.06
GROUP 4.....	\$ 27.99	17.06

GROUP 5.....	\$ 28.14	17.06
GROUP 6.....	\$ 28.39	17.06
GROUP 7.....	\$ 29.49	17.06

PAINTER CLASSIFICATIONS:

GROUP 1: Painters, Brush & Roller

GROUP 2: Bridges

GROUP 3: Structural Steel

GROUP 4: Spray, Except Bar Joist/Deck

GROUP 5: Epoxy/Mastic; Spray- Bar Joist/Deck; Working Above 50 Feet; and Swingstages

GROUP 6: Tanks; Sandblasting

GROUP 7: Towers; Stacks

PAIN0555-002 11/01/2023

ADAMS, HIGHLAND, JACKSON, PIKE & SCIOTO

	Rates	Fringes
PAINTER		
GROUP 1.....	\$ 32.18	20.29
GROUP 2.....	\$ 33.81	20.29
GROUP 3.....	\$ 35.44	20.29
GROUP 4.....	\$ 38.63	20.29

PAINTER CLASSIFICATIONS

GROUP 1 - Containment Builder

GROUP 2 - Brush; Roller; Power Tools, Under 40 feet

GROUP 3 - Sand Blasting; Spray; Steam Cleaning; Pressure Washing; Epoxy & Two Component Materials; Lead Abatement; Hazardous Waste; Toxic Materials; Bulk & Storage Tanks of 25,000 Gallon Capacity or More; Elevated Tanks

GROUP 4 - Stacks; Bridges

PAIN0639-001 05/01/2011

	Rates	Fringes
Sign Painter & Erector.....	\$ 20.61	3.50+a+b+c

FOOTNOTES: a. 7 Paid Holidays: New Year's Day; Memorial Day; July 4th; Labor Day; Thanksgiving Day; Christmas Day & 1 Floating Day

b. Vacation Pay: After 1 year's service - 5 days' paid vacation; After 2, but less than 10 years' service - 10 days' paid vacation; After 10, but less than 20 years' service - 15 days' paid vacation; After 20 years' service - 20 days' paid vacation

c. Funeral leave up to 3 days maximum paid leave for death of mother, father, brother, sister, spouse, child, mother-in-law, father-in-law, grandparent and inlaw provided employee attends funeral

PAIN0788-002 06/01/2023

ASHLAND, CRAWFORD, ERIE, HANCOCK, HURON, MARION, MORROW, OTTAWA (Allen, Bay, Bono, Catawba Island, Clay Center, Curtice, Danbury, Eagle Beach, Elliston, Elmore, Erie, Fishback, Gem Beach & Genoa), RICHLAND, SANDUSKY, SENECA & WYANDOT

	Rates	Fringes
PAINTER		
Brush & Roller.....	\$ 25.78	17.12
Structural Steel.....	\$ 27.38	17.12

WINTER REPAINT: Between December 1 to March 31 - 90%JR

\$.50 PER HOUR SHALL BE ADDED TO THE RATE OF PAY FOR THE CLASSIFICATION OF WORK:

While working swingstage, boatswain chair, needle beam and horizontal cable. While operating sprayguns, sandblasting, cobblasting and high pressure waterblasting (4000psi).

\$1.00 PER HOUR SHALL BE ADDED TO THE RATE OF PAY FOR THE CLASSIFICATION OF WORK:

For the application of catalized epoxy, including latex epoxy that is deemed hazardous, lead abatement, or for work or material where special precautions beyond normal work duties must be taken. For working on stacks, tanks, and towers over 40 feet in height.

PAIN0813-005 12/01/2008

GALLIA, LAWRENCE, MEIGS & VINTON

	Rates	Fringes
PAINTER		
Base Rate.....	\$ 24.83	10.00
Bridges, Locks, Dams & Tension Towers.....	\$ 27.83	10.00

PAIN0841-001 06/01/2023

MEDINA, PORTAGE (South of and including Ohio Turnpike), and
SUMMIT (South of and including Ohio Turnpike) COUNTIES

	Rates	Fringes
Painters:		
GROUP 1.....	\$ 30.18	15.50
GROUP 2.....	\$ 30.83	15.50
GROUP 3.....	\$ 30.93	15.50
GROUP 4.....	\$ 31.03	15.50
GROUP 5.....	\$ 31.43	15.50
GROUP 6.....	\$ 39.20	11.75
GROUP 7.....	\$ 31.68	15.50

PAINTER CLASSIFICATIONS:

GROUP 1 - Brush, Roller & Paperhanger

GROUP 2 - Epoxy Application

GROUP 3 - Swing Scaffold, Bosum Chair, & Window Jack

GROUP 4 - Spray Gun Operator of Any & All Coatings

GROUP 5 - Sandblast, Painting of Standpipes, etc. from
Scaffolds, Bridge Work and/or Open Structural Steel,
Standpipes and/or Water Towers

GROUP 6 - Public & Commerce Transportation, Steel or
Galvanized, Bridges, Tunnels & Related Support Items
(concrete)

GROUP 7 - Synthetic Exterior, Drywall Finisher and/or Taper,
Drywall Finisher and Follow-up Man Using Automatic Tools

PAIN0841-002 06/01/2022

CARROLL, COSHOCTON, HOLMES, STARK, TUSCARAWAS & WAYNE

	Rates	Fringes
PAINTER		
Bridges; Towers, Poles & Stacks; Sandblasting Steel; Structural Steel & Metalizing.....	\$ 23.50	15.45
Brush & Roller.....	\$ 28.18	15.45
Spray; Tank Interior & Exterior.....	\$ 23.50	15.45

PAIN1020-002 07/01/2023

ALLEN, AUGLAIZE, CHAMPAIGN, DEFIANCE, HARDIN, LOGAN, MERCER,
PAULDING, PUTNAM, SHELBY, VAN WERT, and WILLIAMS COUNTIES

	Rates	Fringes
PAINTER		
Brush & Roller.....	\$ 26.64	15.56
Drywall Finishing & Taping..	\$ 27.39	15.56
Lead Abatement.....	\$ 28.39	15.56
Spray, Sandblasting Pressure Cleaning, & Refinery.....	\$ 27.39	15.56
Swing Stage, Chair, Spiders, & Cherry Pickers...	\$ 26.89	15.56
Wallcoverings.....	\$ 27.39	15.56

All surfaces 40 ft. or over where material is applied to or
labor performed on, above ground level (exterior), floor
level (interior) - \$.50 premium

Applying Coal Tar Products - \$1.00 premium

PAIN1275-002 11/01/2023

DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, MADISON, PICKAWAY, ROSS
& UNION

	Rates	Fringes
--	-------	---------

PAINTER

Bridges.....	\$ 35.01	15.16
Brush; Roller.....	\$ 29.40	15.16
Sandblasting; Steamcleaning; Waterblasting (3500 PSI or Over)& Hazardous Work.....	\$ 30.10	15.16
Spray.....	\$ 29.90	15.16
Stacks; Tanks; & Towers.....	\$ 32.21	15.16
Structural Steel & Swing Stage.....	\$ 28.25	15.16

PLAS0109-001 05/01/2023

MEDINA, PORTAGE, STARK, and SUMMIT COUNTIES

	Rates	Fringes
PLASTERER.....	\$ 33.74	19.02

PLAS0109-003 05/01/2023

CARROLL, HOLMES, TUSCARAWAS, and WAYNE COUNTIES

	Rates	Fringes
PLASTERER.....	\$ 33.74	19.02

PLAS0132-002 07/01/2023

BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN COUNTIES

	Rates	Fringes
PLASTERER.....	\$ 28.40	16.24

PLAS0404-002 05/01/2018

ASHTABULA, CUYAHOGA, GEAUGA, AND LAKE COUNTIES

	Rates	Fringes
PLASTERER.....	\$ 29.63	17.11

PLAS0404-003 05/01/2018

LORAIN COUNTY

	Rates	Fringes
--	-------	---------

PLASTERER.....\$ 28.86 17.11

PLAS0526-022 05/01/2018

COLUMBIANA, MAHONING, and TRUMBULL COUNTIES

Rates Fringes

PLASTERER.....\$ 28.86 17.11

PLAS0526-023 05/01/2018

BELMONT, HARRISON, and JEFFERSON COUNTIES

Rates Fringes

PLASTERER.....\$ 28.21 17.11

PLAS0886-001 05/01/2023

FULTON, HANCOCK, HENRY, LUCAS, PUTNAM, and WOOD COUNTIES

Rates Fringes

PLASTERER.....\$ 33.74 18.95

PLAS0886-003 05/01/2023

DEFIANCE, ERIE, HURON, OTTAWA, PAULDING, SANDUSKY, and SENECA
COUNTIES

Rates Fringes

PLASTERER.....\$ 33.74 18.95

PLAS0886-004 05/01/2023

ALLEN, AUGLAIZE, HARDIN, LOGAN, MERCER, and VAN WERT COUNTIES

Rates Fringes

PLASTERER.....\$ 33.74 18.95

PLUM0042-002 07/01/2023

ASHLAND, CRAWFORD, ERIE, HURON, KNOX, LORAIN, MORROW, RICHLAND
& WYANDOT

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 37.62	25.47

 PLUM0050-002 07/03/2023

DEFIANCE, FULTON, HANCOCK, HENRY, LUCAS, OTTAWA, PAULDING,
 PUTNAM, SANDUSKY, SENECA, WILLIAMS & WOOD

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 47.15	30.21

 PLUM0055-003 05/01/2023

ASHTABULA, CUYAHOGA, GEAUGA, LAKE, MEDINA (N. of Rte. #18 &
 Smith Road) & SUMMIT (N. of Rte. #303, including the corporate
 limits of the city of Hudson)

	Rates	Fringes
PLUMBER.....	\$ 41.11	29.88

 PLUM0083-001 07/01/2017

BELMONT & MONROE (North of Rte. #78)

	Rates	Fringes
Plumber and Steamfitter.....	\$ 32.16	31.51

 PLUM0094-002 05/01/2023

CARROLL (Northen Half), STARK, and WAYNE COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 38.03	23.09

 PLUM0120-002 05/01/2023

ASHTABULA, CUYAHOGA, GEAUGA, LAKE, LORAIN (the C.E.I. Power
 House in Avon Lake), MEDINA (N. of Rte. #18) & SUMMIT (N. of
 #303)

	Rates	Fringes
PIPEFITTER.....	\$ 45.62	27.30

 PLUM0162-002 06/01/2023

CHAMPAIGN, CLARK, CLINTON, DARKE, FAYETTE, GREENE, MIAMI,
 MONTGOMERY & PREBLE

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 40.00	26.87

 PLUM0168-002 06/01/2023

MEIGS, MONROE (South of Rte. #78), MORGAN (South of Rte. #78)
 & WASHINGTON

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 38.95	34.97

 PLUM0189-002 06/01/2022

DELAWARE, FAIRFIELD, FRANKLIN, HOCKING, LICKING, MADISON,
 MARION, PERRY, PICKAWAY, ROSS & UNION

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 43.25	26.94

 PLUM0219-002 06/01/2023

MEDINA (Rte. #18 from eastern edge of Medina Co., west to
 eastern corporate limits of the city of Medina, & on the county
 road from the west corporate limits of Medina running due west
 to and through community of Risley to the western edge of
 Medina County - All territory south of this line), PORTAGE, and
 SUMMIT (S. of Rte. #303) COUNTIES

	Rates	Fringes
Plumber and Steamfitter.....	\$ 43.22	27.29

PLUM0392-002 06/01/2023

BROWN, BUTLER, CLERMONT, HAMILTON & WARREN

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 38.62	25.83

PLUM0396-001 06/01/2023

COLUMBIANA (Excluding Washington & Yellow Creek Townships & Liverpool Twp. - Secs. 35 & 36 - West of County Road #427), MAHONING and TRUMBULL COUNTIES

	Rates	Fringes
PLUMBER/PIPEFITTER.....	\$ 37.10	28.51

PLUM0495-002 06/01/2023

CARROLL (Rose, Monroe, Union, Lee, Orange, Perry & Loudon Townships), COLUMBIANA (Washington & Yellow Creek Townships & Liverpool Township, Secs. 35 & 36, West of County Rd. #427), COSHOCTON, GUERNSEY, HARRISON, HOLMES, JEFFERSON, MORGAN (South to State Rte. #78 & from McConnelville west on State Rte. #37 to the Perry County line), MUSKINGUM, NOBLE, and TUSCARAWAS COUNTIES

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 32.23	35.40

PLUM0577-002 06/01/2023

ADAMS, ATHENS, GALLIA, HIGHLAND, JACKSON, LAWRENCE, PIKE, SCIOTO & VINTON

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 39.98	26.48

PLUM0776-002 07/01/2023

ALLEN, AUGLAIZE, HARDIN, LOGAN, MERCER, SHELBY and VAN WERT COUNTIES

	Rates	Fringes
Plumber, Pipefitter, Steamfitter.....	\$ 40.07	28.95

TEAM0377-003 05/01/2023

STATEWIDE, EXCEPT CUYAHOGA, GEAUGA & LAKE

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	\$ 31.49	16.40
GROUP 2.....	\$ 31.91	16.40

TRUCK DRIVER CLASSIFICATIONS

GROUP 1 - Asphalt Distributor; Batch; 4- Wheel Service;
4-Wheel Dump; Oil Distributor & Tandem

GROUP 2 - Tractor-Trailer Combination: Fuel; Pole Trailer;
Ready Mix; Semi-Tractor; & Asphalt Oil Spraybar Man When
Operated From Cab; 5 Axles & Over; Belly Dump; End Dump;
Articulated Dump; Heavy Duty Equipment; Low Boy; & Truck
Mechanic

TEAM0436-002 05/01/2023

CUYAHOGA, GEAUGA & LAKE

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	\$ 31.00	18.95
GROUP 2.....	\$ 32.50	18.95

GROUP 1: Straight & Dump, Straight Fuel

GROUP 2: Semi Fuel, Semi Tractor, Euclids, Darts, Tank,
Asphalt Spreaders, Low Boys, Carry-All, Tourna-Rockers,
Hi-Lifts, Extra Long Trailers, Semi-Pole Trailers, Double
Hook-Up Tractor Trailers including Team Track & Railroad
Siding, Semi-Tractor & Tri-Axle Trailer, Tandem Tractor &
Tandem Trailer, Tag Along Trailer, Expandable Trailer or
Towing Requiring Road Permits, Ready-Mix (Agitator or
Non-Agitator), Bulk Concrete Driver, Dry Batch Truck,
Articulated End Dump

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

=====
** Workers in this classification may be entitled to a higher minimum wage under Executive Order 14026 (\$17.20) or 13658 (\$12.90). Please see the Note at the top of the wage determination for more information. Please also note that the minimum wage requirements of Executive Order 14026 are not currently being enforced as to any contract or subcontract to which the states of Texas, Louisiana, or Mississippi, including their agencies, are a party.

Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular

rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010

08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor

200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

=====

END OF GENERAL DECISION"

NATIONWIDE PERMITS FOR THE STATE OF OHIO

U.S. ARMY CORPS OF ENGINEERS (CORPS) REGULATORY PROGRAM REISSUANCE AND ISSUANCE OF NATIONWIDE PERMITS WITH OHIO EPA 401 WATER QUALITY CERTIFICATION AND OHIO DEPARTMENT OF NATURAL RESOURCES CONSISTENCY DETERMINATION UNDER THE COASTAL ZONE MANAGEMENT ACT

Final rule published in the *Federal Register* (86 FR 73522) on December 27, 2021

NWP 3

3. Maintenance.

(a) The repair, rehabilitation, or replacement of any previously authorized, currently serviceable structure or fill, or of any currently serviceable structure or fill authorized by 33 CFR 330.3, provided that the structure or fill is not to be put to uses differing from those uses specified or contemplated for it in the original permit or the most recently authorized modification. Minor deviations in the structure's configuration or filled area, including those due to changes in materials, construction techniques, requirements of other regulatory agencies, or current construction codes or safety standards that are necessary to make the repair, rehabilitation, or replacement are authorized. This NWP also authorizes the removal of previously authorized structures or fills. Any stream channel modification is limited to the minimum necessary for the repair, rehabilitation, or replacement of the structure or fill; such modifications, including the removal of material from the stream channel, must be immediately adjacent to the project. This NWP also authorizes the removal of accumulated sediment and debris within, and in the immediate vicinity of, the structure or fill. This NWP also authorizes the repair, rehabilitation, or replacement of those structures or fills destroyed or damaged by storms, floods, fire or other discrete events, provided the repair, rehabilitation, or replacement is commenced, or is under contract to commence, within two years of the date of their destruction or damage. In cases of catastrophic events, such as hurricanes or tornadoes, this two-year limit may be waived by the district engineer, provided the permittee can demonstrate funding, contract, or other similar delays.

(b) This NWP also authorizes the removal of accumulated sediments and debris outside the immediate vicinity of existing structures (e.g., bridges, culverted road crossings, water intake structures, etc.). The removal of sediment is limited to the minimum necessary to restore the waterway in the vicinity of the structure to the approximate dimensions that existed when the structure was built, but cannot extend farther than 200 feet in any direction from the structure. This 200 foot limit does not apply to maintenance dredging to remove accumulated sediments blocking or restricting outfall and intake structures or to maintenance dredging to remove accumulated sediments from canals associated with outfall and intake structures. All dredged or excavated materials must be deposited and retained in an area that has no waters of the United

States unless otherwise specifically approved by the district engineer under separate authorization.

(c) This NWP also authorizes temporary structures, fills, and work, including the use of temporary mats, necessary to conduct the maintenance activity. Appropriate measures must be taken to maintain normal downstream flows and minimize flooding to the maximum extent practicable, when temporary structures, work, and discharges of dredged or fill material, including cofferdams, are necessary for construction activities, access fills, or dewatering of construction sites. Temporary fills must consist of materials, and be placed in a manner, that will not be eroded by expected high flows. After conducting the maintenance activity, temporary fills must be removed in their entirety and the affected areas returned to pre-construction elevations. The areas affected by temporary fills must be revegetated, as appropriate.

(d) This NWP does not authorize maintenance dredging for the primary purpose of navigation. This NWP does not authorize beach restoration. This NWP does not authorize new stream channelization or stream relocation projects.

Notification: For activities authorized by paragraph (b) of this NWP, the permittee must submit a pre-construction notification to the district engineer prior to commencing the activity (see general condition 32). The pre-construction notification must include information regarding the original design capacities and configurations of the outfalls, intakes, small impoundments, and canals. (Authorities: Section 10 of the Rivers and Harbors Act of 1899 and Section 404 of the Clean Water Act (Sections 10 and 404))

Note: This NWP authorizes the repair, rehabilitation, or replacement of any previously authorized structure or fill that does not qualify for the Clean Water Act Section 404(f) exemption for maintenance

Corps NWP 3 Specific Regional Conditions:

- PCN in accordance with NWP General Condition 32 and Regional General Condition 6 is required for the following activities:
 - Any jurisdictional stream or ditch channel modification (reconfiguration or reconstruction of all or part of a channel, such as by straightening, relocating, lining, or excavating the channel, or by enclosing the channel within a structure such as a pipe or culvert) that exceeds a distance of 50 feet upstream and 50 feet downstream of the structure;
 - The placement of any new rip-rap below the ordinary high water mark when associated with an existing bridge or similar crossing exceeding a total of 200 feet extending in either direction from the crossing;
 - The replacement of any permanent vertical bulkhead greater than one (1) foot waterward of the original alignment. A vertical bulkhead is defined as any structure, or fill, with a vertical face. It

- may be constructed of timber, steel, concrete, etc.;
- Activities in Section 10 navigable waters that involve the discharge of greater than 25 cubic yards of dredged or fill material below the ordinary high water mark; and
- All activities in Section 10 navigable waters, and federal harbors in Lake Erie.
- For projects located along the shorelines of Lake Erie, Sandusky Bay, and Maumee Bay, all sand and gravel located below the proposed project, both below and above ordinary high water mark (573.4 feet International Great Lakes Datum 1985), will be excavated down to clay or bedrock, and side cast into the nearshore area either immediately waterward or downdrift of the project area. It will be at the discretion of the district engineer to determine whether the material located below the authorized structure needs to be relocated, where it should be relocated to, and the appropriate authorization, if needed, for the relocation. Verification of the placement of the excavated material within the nearshore area shall be documented through the submittal of dated photographs and an accompanying photo location map to the district engineer within 30 days of commencement of the project.

Ohio 401 Certification Special Limitations and Conditions:

1. Ohio state certification general limitations and conditions apply to this nationwide permit.
2. Individual 401 WQC is required for temporary or permanent impacts to category 3 wetlands that exceed 0.1 acres. Impacts to category 3 wetlands are only allowable for activities involving the repair, maintenance, replacement, or safety upgrades to existing infrastructure that meets the definition of public need. Ohio EPA will make the determination if a project meets public need during the ORAM verification process.
3. Individual 401 WQC is required for temporary or permanent impacts to category 1 and category 2 wetlands that exceed 0.50 acres.
4. Individual 401 WQC is required for the replacement of existing structures that are open to the flow of water with structures that are not open to the flow of water.
5. Replacement vertical bulkheads shall not be placed more than an average one foot waterward of the ordinary high water mark of the water body. For vertical bulkheads on Lake Erie, toe stone shall be placed at the base of the vertical bulkhead except in areas where the original shoreline is composed of bedrock and slopes are predominantly greater than 75 percent or where the placement of toe stone will interfere with shipping activity. When required, toe stone shall

be placed at an average rate of one-third the total height of the exposed face of the vertical bulkhead at a 2:1 slope.

6. Removal of accumulated sediment shall occur only once per year and shall be limited to low-flow conditions, except in cases of emergency situations that threaten life or property.
7. For projects which involve temporary impacts to wetlands: upon the cessation of earth moving activities, any hydric topsoil removed from a wetland shall be separated and saved for later placement as the topmost backfill layer when the wetland is restored to grade.
8. For an individual stream, while the repair or replacement of an existing culvert of any length is not limited by this certification, an individual 401 WQC is required for any culvert extension that exceeds 300 linear feet

Ohio Department of Natural Resources CZMA Federal Consistency Determination Condition:

- For all activities located within or along the shore of Ohio's portion of Lake Erie, including Maumee Bay and Sandusky Bay, all applicable authorizations under the Ohio Coastal Management Program must be obtained.

A. Special Note: For NWP's that do not require pre-construction notification to the Corps, it is an applicant's responsibility to review the Water Quality Certification general and NWP-specific terms and conditions and submit information to the OEPA as required by their water quality certification. A project that meets the terms and conditions of a NWP with no Pre-Construction Notification to the Corps is only valid when accompanied by a blanket or individual 401 Water Quality Certification from the OEPA. No work in waters of the United States may commence until the required 401 water quality certification (or waiver) has been obtained from the OEPA.

B. Nationwide Permits Regional General Conditions (Applies to All Nationwide Permits)

1. NWP's shall not authorize any regulated activity which negatively impacts bogs and/or fens.
2. NWP's shall not authorize any regulated activity in Lake Erie which would result in diversion of water from the Great Lakes.
3. NWP's shall not authorize any regulated activity which has an adverse impact on littoral transport within Lake Erie.
4. **In-Water Work Exclusion Dates:** Any work associated with a regulated activity

under a nationwide permit cannot take place during the restricted period of the following Ohio Department of Natural Resources (ODNR), Division of Wildlife (DOW) In-Water Work Restrictions, unless the applicant receives advanced written approval from the DOW, notifies the District Engineer in accordance with Nationwide Permit General Condition 32 and Regional General Condition 6, and receives written approval from the Corps:

Statewide In-Water Work Restriction Periods and Locations

1. Salmonid Locations Restriction Period: September 15 – June 30

Arcola Creek (entire reach)
Ashtabula Harbor
Ashtabula River (Hadlock Rd. to mouth)
Aurora Branch (Chagrin River (RM 0.38 to mouth))
Big Creek (Grand River (Girdled Road to mouth))
Black River (entire reach)
Chagrin River (Chagrin Falls to mouth)
Cold Creek (entire reach)
Conneaut Creek (entire reach)
Conneaut Harbor
Corporation Creek (Chagrin River (entire reach))
Cowles Creek (entire reach)
Ellison Creek (Grand River (entire reach))
Euclid Creek (entire reach)
Fairport Harbor
Grand River (Dam at Harpersfield Covered Bridge Park to mouth)
Gulley Brook (Chagrin River (entire reach))
Huron River (East Branch-West Branch confluence to mouth)
Indian Creek (entire reach)
Kellogg Creek (Grand River (entire reach))
Mill Creek (Grand River (entire reach))
Paine Creek (Grand River (Paine Falls to mouth))
Rocky River (East Branch-West Branch confluence to mouth)
Smokey Run (Conneaut Creek (entire reach))
Turkey Creek (entire reach)
Vermilion River (dam at Wakeman upstream of the US 20/SR 60 bridge to mouth)
Ward Creek (Chagrin River (entire reach))
Wheeler Creek (entire reach)
Whitman Creek (entire reach)

2. Other Locations Restriction Period: March 15 – June 30

All other perennial streams not listed above as salmonid.
Also includes Lake Erie and bays not listed above as salmonid.

Note: This condition does not apply to Ohio Department of Transportation projects that are covered under the “Memorandum of Agreement Between The Ohio Department of Transportation, The Ohio Department of Natural Resources, and The United States Fish and Wildlife Service For Interagency Coordination For Projects Which Require Consultation Under the Endangered Species Act, Impact State Listed Species, and/or Modify Jurisdictional Waters 2016 Agreement Number: 19394” or subsequent amendments to this Ohio Department of Transportation memorandum of agreement.

5. Waters of Special Concern: PCN in accordance with NWP General Condition 32 and Regional General Condition 6 is required for regulated activities in the following resources:

- a. **Threatened and Endangered Species:** Due to the potential presence of federally threatened or endangered species or their habitats, PCN in accordance with NWP General Conditions 18 and 32 and Regional General Condition 6 is required for any regulated activity under the NWPs in Ohio that includes:
 - i. The removal of trees \geq three (3) inches diameter at breast height. These trees may provide suitable roosting, foraging, or traveling habitat for the federally listed endangered Indiana bat and the federally-listed threatened northern long-eared bat; and/or
 - ii. Regulated activities that impact a sand, gravel, and/or cobble beach (landform between the low and high water marks affected by waves) and/or mud flat (areas affected by natural seiche effect) on the Lake Erie shoreline; and/or
 - iii. Regulated activities in the waterway or township of the corresponding counties listed in Appendix 1.

Note 1: Applicants must ensure they are referencing the latest version of Appendix 1 by contacting their nearest U.S. Army Corps of Engineers district office and visiting the online resources identified in General Condition 18(f) of these NWPs, since federally listed species are continuously listed, proposed for listing, and/or de-listed.

Note 2: As mentioned in General Condition 18, federal applicants should follow their own procedures for complying with the requirements of the Endangered Species Act (ESA). Federal applicants, including applicants that have received federal funding, must provide the District Engineer with the appropriate documentation to demonstrate compliance with ESA requirements.

b. **Critical Resource Waters:**

- i. In Ohio, two (2) areas have been designated critical habitat for the piping plover (*Charadrius melodus*) and are defined as lands 0.62 mile inland from normal high water line. Unit OH-1 extends from the mouth of Sawmill Creek to the western property boundary of Sheldon Marsh State Natural Area, Erie County, encompassing approximately two (2) miles. Unit OH-2

- extends from the eastern boundary line of Headland Dunes Nature Preserve to the western boundary of the Nature Preserve and Headland Dunes State Park, Lake County, encompassing approximately 0.5 mile.
- ii. In Ohio three (3) areas have been designated critical habitat for the rabbitsfoot mussel (*Quadrula cylindrica cylindrica*). Unit RF26 includes 17.5 river kilometers (rkm) (10.9 river miles [rimi]) of the Walhonding River from the convergence of the Kokosing and Mohican Rivers downstream to Ohio Highway 60 near Warsaw, Coshocton County, Ohio. Unit RF27 includes 33.3 rkm (20.7 rmi) of Little Darby Creek from Ohio Highway 161 near Chuckery, Union County, Ohio, downstream to U.S. Highway 40 near West Jefferson, Madison County, Ohio. Unit RF29 includes 7.7 rkm (4.8 rmi) of Fish Creek from the Indiana and Ohio State line northwest of Edgerton, Ohio, downstream to its confluence with the St. Joseph's River north of Edgerton, Williams County, Ohio.
 - iii. Old Woman Creek National Estuarine Research Preserve.
- c. **Oak Openings:** Wetland activities conducted in the Oak Openings Region of Northwest Ohio located in Lucas, Henry and Fulton Counties. For a map of the Oak Openings Region, visit <https://www.google.com/maps/d/viewer?mid=1JADupaZXJzO6AUDvnUaV18GVjG7yfBim&usp=sharing>
 - d. **Category 3 Wetlands:** As determined through use of the latest approved version of the Ohio Environmental Protection Agency's Ohio Rapid Assessment Method wetland evaluation form.
 - e. **Ohio Stream Designations:** Exceptional Warmwater Habitat, Cold Water Habitat, Seasonal Salmonid, or any equivalent designation; or water bodies with an antidegradation category of Superior High Quality Water, Outstanding National Resource Water, or Outstanding State Waters as determined by the Ohio Environmental Protection Agency except for NWP 1, 2, 3, 9, 10, 11, 27, 28, 32, and 35 or maintenance activities covered under NWPs 7 and 12. The current list of these rivers and tributaries can be found on the Ohio Environmental Protection Agency web-site at: http://www.epa.ohio.gov/dsw/rules/3745_1.aspx. These designations can be found under the aquatic life use of the rivers and tributaries within its basin and under the "Anti-deg Rule #05."

6. **PCN Submittals:** In addition to the information required under NWP General Condition 32, the following information must be provided with the PCN:

- a. **Threatened and Endangered Species:** Section 7(a)(2) of the Endangered Species Act (ESA) states that each federal agency shall, in consultation with the Secretary, insure that any action they authorize, fund, or carry out is not likely to jeopardize the continued existence of a listed species or result in the destruction or adverse modification of designated critical habitat. Section 7 of the ESA, called "Interagency Cooperation," is the mechanism by which

federal agencies ensure the actions they take, including those they fund or authorize, do not jeopardize the continued existence of any federally or proposed federally listed species. Consistent with NWP General Condition 18, information for federally threatened and endangered species must be provided in the PCN to determine the proposed activity's compliance with NWP General Condition 18 and to facilitate project-specific coordination with the USFWS. All relevant information obtained from the USFWS must be submitted with the PCN.

- b. **Cultural Resources:** Under the National Historic Preservation Act (NHPA), the Corps must ensure no federal undertaking, including a Corps permit action, which may affect historic resources, is commenced before the impacts of such action are considered and the Advisory Council on Historic Preservation and the State Historic Preservation Office (SHPO) are provided an opportunity to comment as required by the NHPA, 36 CFR 800, and 33 CFR 325, Appendix C. Consistent with NWP General Condition 20, historic properties information must be provided in the PCN if the proposed undertaking might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places, including previously unidentified properties. All relevant information obtained from the SHPO must be submitted with the PCN.
- c. **National Wild and Scenic Rivers:** The following waterways are components of the National Wild and Scenic River System and require PCN to the Corps:

Big and Little Darby Creeks

- Big Darby Creek from Champaign-Union County line downstream to the Conrail railroad trestle and from the confluence with the Little Darby Creek downstream to the Scioto River;
- Little Darby Creek from the Lafayette-Plain City Road bridge downstream to within 0.8 mile from the confluence with Big Darby Creek; and
- Total designation is approximately 82 miles.

Little Beaver Creek

- Little Beaver Creek main stem, from the confluence of West Fork with Middle Fork near Williamsport to mouth;
- North Fork from confluence of Brush Run and North Fork to confluence of North Fork with main stem at Fredericktown;
- Middle Fork from vicinity of Co. Rd. 901 (Elkton Road) bridge crossing to confluence of Middle Fork with West Fork near Williamsport;
- West Fork from vicinity of Co. Rd. 914 (Y-Camp Road) bridge crossing east to confluence of West Fork with Middle Fork near Williamsport; and
- Total designation is 33 miles.

Little Miami River

- Little Miami River - St. Rt. 72 at Clifton to the Ohio River;
- Caesar Creek - lower two (2) miles of Caesars Creek; and
- Total designation is 94 miles.

d. **Temporary Fills or Structures:** When a PCN is required for temporary fills or structures, the PCN must specify how long the temporary fills or structures will remain and include a restoration plan showing how all temporary fills and structures will be removed and the area restored to pre-construction contours and elevations. Native, non-invasive vegetation must be used unless otherwise authorized by a Corps NWP verification.

7. **Invasive Species:** No area for which grading has been completed will be unseeded or unmulched for longer than 14 days. All disturbed areas will be seeded and/or revegetated with native species and approved seed mixes (where practicable) after completion of construction activities for stabilization and to help preclude the establishment of non-native invasive species.

APPENDIX 1 TO REGIONAL GENERAL CONDITION 5 (a)		
County	Waterway	Township
Adams	Ohio River, Scioto Brush Creek, South Fork Scioto Brush Creek	
Ashtabula	Grand River, Pymatuning Creek	Andover, Austinburg, Cherry Valley, Colebrook, Dorset, Hartsgrove, Harpersfield, Morgan, New Lyme, Orwell, Richmond, Rome, Trumbull, Wayne, Williamsfield, Windsor
Athens	Ohio River	
Brown	East Fork Little Miami River, Ohio River	
Butler	Great Miami River	Lemon, Liberty
Champaign		Mad River, Union, Urbana
Clark	Little Miami River	Bethel, Moorfield, Pleasant, Springfield
Clermont	East Fork Little Miami River, Little Miami River, Ohio River	
Clinton		Chester, Richland, Wayne
Columbiana		Butler, Fairfield, Hanover, Knox, Unity
Coshocton	Killbuck Creek, Muskingum River, Walhonding River	
Crawford		Auburn, Bucyrus, Cranberry, Dallas,

APPENDIX 1 TO REGIONAL GENERAL CONDITION 5 (a)

County	Waterway	Township
		Holmes, Whetstone
Darke	Stillwater River	
Defiance	St. Joseph River	Milford
Delaware	Mill Creek, Olentangy River	
Erie		Margaretta
Fairfield		Walnut
Fayette		Concord, Green, Jasper, Union
Franklin	Big Darby Creek, Little Darby Creek, Scioto River	
Fulton	Swan Creek	
Gallia	Ohio River	
Greene	Little Miami River	Bath, Beaver Creek, Spring Valley, Sugar Creek
Hamilton	Great Miami River, Little Miami River, Ohio River	
Hancock	Blanchard River	
Hardin	Blanchard River	Blanchard, Dudley, Hale, Jackson, McDonald, Roundhead
Hocking		Benton, Laurel
Holmes		All townships
Huron		New Haven, Richmond
Lake	Grand River	Madison
Lawrence	Ohio River	
Licking		Licking, Union
Logan	Great Miami River	Perry, Richland, Stokes, Washington, Zane
Lucas	Swan Creek	All townships
Madison	Big Darby Creek, Little Darby Creek	
Mahoning		Beaver, Boardman, Canfield, Green, Poland, Springfield
Marion	Tymochtee Creek	Big Island, Bowling Green, Grand, Green Camp, Montgomery, Salt Rock
Meigs	Ohio River	
Miami	Great Miami River, Stillwater River	
Montgomery	Great Miami River, Stillwater River	Mad River, Wayne
Morgan	Muskingum River	

APPENDIX 1 TO REGIONAL GENERAL CONDITION 5 (a)

County	Waterway	Township
Muskingum	Muskingum River	
Ottawa		All townships
Perry		Thorn
Pickaway	Big Darby Creek, Scioto River	
Pike	Scioto River	
Portage		Aurora, Atwater, Charlestown, Deerfield, Edinburg, Franklin, Freedom, Mantua, Nelson, Palmyra, Paris, Randolph, Ravenna, Rootstown, Streetsboro
Preble		Dixon, Gasper, Israel, Jackson, Lanier, Monroe, Somers, Twin, Washington
Richland		Plymouth
Ross	Salt Creek, Scioto River	
Sandusky		All townships
Scioto	Ohio River, Scioto Brush Creek, Scioto River, South Fork Scioto Brush Creek	Nile, Rush, Union
Shelby	Great Miami River	
Stark		Lexington, Marlboro
Summit		Hudson, Tallmadge, Twinsburg
Trumbull	Pymatuning Creek	All townships
Union	Big Darby Creek, Little Darby Creek, Mill Creek, Treacle Creek	Allen, Darby, Washington
Warren	Great Miami River, Little Miami River	Clear Creek, Deerfield, Massie, Turtle Creek, Union, Washington, Wayne
Washington	Muskingum River, Ohio River	
Wayne		All townships
Williams	Fish Creek, St. Joseph River	Bridgewater, Center, Florence, Jefferson, Madison, Northwest, St. Joseph, Superior
Wyandot	Tymochtee Creek	Antrim, Marseilles, Mifflin, Pitt

**HELPFUL INFORMATION FOR COMPLIANCE WITH THE
NWP GENERAL CONDITIONS**

DISCLAIMER: The below information is intended to provide helpful contact information and other submittal recommendations. Contact the appropriate local, state, or federal agency for the most updated links to ensure compliance with the NWP General

Conditions.

General Condition 1 (Navigation)

List of Section 10 Navigable Waters of the U.S.:

Buffalo District –

https://www.lrb.usace.army.mil/Portals/45/docs/regulatory/DistrictInfo/waterway_oh.pdf

Huntington District – <https://www.lrh.usace.army.mil/Missions/Regulatory/Section-10-Streams/>

Louisville District –

<https://www.lrl.usace.army.mil/Portals/64/docs/Regulatory/Public%20Notices/Limits%20of%20Jurisdiction%20Public%20Notice-revised.pdf?ver=2013-02-13-120705-203>

Pittsburgh District –

<https://www.lrp.usace.army.mil/Portals/72/docs/regulatory/RegulatoryBoundaries/PN12-2.pdf>

Navigation Charts:

Buffalo District – <https://www.lrb.usace.army.mil/Library/Maps-and-Charts/>

Huntington District – <https://www.lrh.usace.army.mil/Missions/Regulatory/Section-10-Streams/>

Louisville District –

<https://www.lrl.usace.army.mil/Portals/64/docs/Ops/Navigation/Charts/Ohio/OhioRiverCharts102-122.pdf>

Pittsburgh District – <https://www.lrp.usace.army.mil/Missions/Navigation/Navigation-Charts/>

Locks and Dams:

Buffalo District – <https://www.lrb.usace.army.mil/Library/Maps-and-Charts/>

Huntington District – <https://www.lrh.usace.army.mil/Missions/Civil-Works/Locks-and-Dams/>

Louisville District – <https://www.lrl.usae.army.mil/Missions/Civil-Works/Navigation/Locks-and-Dams/>

Pittsburgh District –

<https://www.lrp.usace.army.mil/Missions/Navigation/Locks-and-Dams/#:~:text=Locks%20and%20Dams%20%20%20Allegheny%20River%20,Locks%20%26%20Dam%20%20%205%20more%20rows%20>

Notice to Navigation Interests Request Sheets:

Huntington District –

<https://www.lrh.usace.army.mil/Portals/38/docs/navigation/Notice%20Info%20sheet.pdf>

Louisville –

<https://www.lrl.usace.army.mil/Portals/64/docs/Regulatory/Forms/Notice%20to%20Navigation%20Interests%20Data%20Form%202019.pdf?ver=2019-07-22-101251-297>

Pittsburgh District –

<https://www.lrp.usace.army.mil/Portals/72/docs/regulatory/NavNoticeRequestForm.pdf>

General Condition 5 (Shellfish Beds)

Shellfish beds in Ohio include concentrations of freshwater mussels. All native mussels are protected in the State of Ohio (Section 1533.324 of the Ohio Revised Code). In addition, 10 federally listed species occur in the state and are protected by the ESA (87 Stat. 884, as amended; 16 U.S.C. 1531 et seq.). All rivers and tributaries that contain mussels or potential mussel habitat must be surveyed prior to any proposed streambed disturbance. Currently accepted protocol and supporting materials can be found on the Ohio Department of Natural Resources' website:

<https://ohiodnr.gov/wps/portal/gov/odnr/buy-and-apply/special-use-permits/collecting-research/ohio-mussel-surveyor>

General Condition 7 (Water Supply Intakes)

Locations of drinking water source protection areas associated with public water supply intakes, including the name of the public water supply, can be found at the following link:

<https://oepa.maps.arcgis.com/apps/webappviewer/index.html?id=3b39e11ba7fc43c3b41801e3580e6d21>

Contact information for public water suppliers can be obtained from Ohio EPA by contacting the Division of Drinking and Ground Waters at whp@epa.ohio.gov or 614-644-2752.

General Condition 10 (Fills Within 100-year Floodplains)

The following website provides a statewide listing of Floodplain Managers in Ohio:

<https://ohiodnr.gov/wps/portal/gov/odnr/discover-and-learn/safety-conservation/about-ODNR/water-resources/floodplains/>

General Condition 16 (Wild and Scenic Rivers)

Prior to submitting a PCN for work in a National Wild and Scenic River System, it is recommended that the applicant contact the National Park Service Regional Wild and Scenic Rivers Specialist, at the Midwest Regional Office, 601 Riverfront Drive, Omaha, Nebraska 68102, for assistance in complying with NWP General Condition 16. Any determination provided by the National Park Service should be submitted with the PCN. The following website provides information on National Wild and Scenic Rivers within Ohio:

<https://www.rivers.gov/ohio.php>

General Condition 18 (Endangered Species)

To obtain the most up to date information on federally threatened and endangered species applicants are encouraged to utilize the USFWS's Information for Planning and Consultation System (IPaC) found at <https://ecos.fws.gov/ipac/>

Prior to the submittal of a PCN, applicants may also contact the USFWS, Ohio Ecological Services Field Office at:

Address: 4625 Morse Road, Suite 104
Columbus, Ohio 43230

Email: ohio@fws.gov

Phone: (614) 416-8993

The Ohio Mussel Survey Protocol may be found at the following link:

<https://ohiodnr.gov/wps/portal/gov/odnr/buy-and-apply/special-use-permits/collecting-research/ohio-mussel-surveyor>

General Condition 4 (Migratory Bird Breeding Areas) and General Condition 19 (Migratory Birds and Bald and Golden Eagles)

Prior to the submittal of a PCN, information to assist in complying with NWP General Conditions 4 and 19 may be obtained from the USFWS, Ohio Ecological Services Field Office at:

Address: 4625 Morse Road, Suite 104
Columbus, Ohio 43230

Email: ohio@fws.gov

Phone: (614) 416-8993

The Ohio Division of Natural Resources Division of Wildlife may be contacted at (800) 945-3543.

General Condition 20 (Historic Properties)

The Ohio National Register of Historic Places can be found at the following link:
<https://www.ohiohistory.org/preserve/state-historic-preservation-office/nationalregister>

When reviewing a PCN, the Corps will scope appropriate historic property identification efforts and, if applicable, work with the applicant to take into account the effect of the proposed activity on historic properties. In these instances, information and coordination may include:

- Requesting comments directly from the Ohio History Connection SHPO on the effect the proposed regulated activity may have on historic properties. The Ohio History Connection SHPO may be contacted at:

Address: Ohio History Center
800 E. 17th Ave., Columbus, Ohio 43211
Phone: (614) 297-2300
Email: info@ohiohistory.org

- To identify potential historic properties that may be affected by a proposed project, the following information may be reviewed and/or provided with the PCN when applicable:
 - A detailed description of the project site in its current condition (i.e. prior to construction activities) including information on the terrain and topography of the site, the acreage of the site, the proximity of the site to major waterways, and any known disturbances within the site.
 - A detailed description of past land uses in the project site.
 - Photographs and mapping showing the site conditions and all buildings or structures within the project site and on adjacent parcels are useful. Photographs and maps supporting past land uses should be provided as available.
 - Information regarding any past cultural resource studies or coordination pertinent to the project area, if available.
 - U.S. Geological Survey (USGS) 7.5' series topographic maps;
 - Ohio History Connection SHPO files including:
 - Ohio Archaeological Inventory (OAI) files;
 - Ohio Historic Inventory files (OHI);
 - Ohio SHPO Cultural Resources Management (CRM)/contract archaeology files;
 - NRHP files including Historic Districts; and
 - County atlases, histories and historic USGS 15' series topographic map(s).

- When needed to evaluate effects to historic properties, the applicant is encouraged to consult with professionals meeting the Professional Qualification Standards as set forth in the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation (48 FR 44716) during this data gathering process. These professionals can assist with compiling the project information discussed above and should provide recommendations as to whether the proposal has the potential to affect historic properties and if further effort is needed to identify or assess potential effects to historic properties. These professionals can also compile preliminary review information to submit to the District Engineer as part of the PCN.

General Condition 23 (Mitigation)

Information pertaining to mitigation can be found at the following link:

<https://www.lrh.usace.army.mil/Missions/Regulatory/Mitigation.aspx>

General Condition 25 (Water Quality)

The Ohio Environmental Protection Agency may be contacted at:

Address: Lazarus Government Center
50 W Town St. Suite 700
Columbus, Ohio 43215

Phone: (614) 644-2001

Information pertaining to the Ohio Environmental Protection Agency water quality certification (WQC) program, including the Section 401 Clean Water Act WQC application form, can be obtained at the following link:

<https://www.epa.state.oh.us/dsw/#113292723-programs>

General Condition 32 (Pre-Construction Notification)

The nationwide permit pre-construction notification form (Form ENG 6082) may be obtained at the following link:

https://www.publications.usace.army.mil/Portals/76/Eng_Form_6082_2019Oct.pdf?ver=2019-10-22-081550-710/

A checklist of information that must be provided in a pre-construction notification can be obtained at the following link:

<https://www.lrh.usace.army.mil/Missions/Regulatory/How-to-Apply-for-a-Permit/Nationwide-Permits/>

Electronic Submittal:

- PCNs should be saved as a PDF document, and then submitted as an attachment in an email to the appropriate Regulatory Office:

Buffalo District – LRB.Ohio.RegActions@usace.army.mil

Huntington District – LRH.permits@usace.army.mil

Louisville District – CELRL.Door.To.The.Corps@usace.army.mil

Pittsburgh District – Regulatory.Permits@usace.army.mil

- Electronic documents must have sufficient resolution to show project details. The PCN and supporting documents submitted electronically must not exceed 10 megabytes (10MB) per email. Multiple emails may be required to transmit documents to ensure the 10MB limit is not exceeded. Alternatively, use of the Department of Defense Secure Access File Exchange (DoD SAFE) service to transfer large files may be requested in your email.
- For tracking and processing purposes, the email should include the following:
 - **Email Subject Line:** include the name of the applicant, type of PCN request, and location (County and State). Example: RE: Doe, John, PCN and Section 401 WQC Request, Summit County, Ohio;
 - **Email Body:** 1) Brief description of the proposed project, 2) contact information (phone number, mailing address, and email address) for the applicant and/or their agent, and 3) the project location: Address and Latitude/Longitude in decimal degrees (e.g. 42.92788° N, 88.36257° W).
- If you do not have internet access, information may be submitted through the U.S. Postal Service to the appropriate Regulatory Office:

U.S. Army Corps of Engineers, Buffalo District

ATTN: Regulatory Branch

1776 Niagara Street

Buffalo, New York 14207

Phone: (716) 879-4330

Fax: (716) 879-4310

U.S. Army Corps of Engineers, Huntington District

ATTN: Regulatory Division

502 Eighth Street

Huntington, West Virginia 25701-2070

Phone: (304) 399-5210

Fax: (304) 399-5805

U.S. Army Corps of Engineers, Pittsburgh District
ATTN: Regulatory Division
William S. Moorhead Federal Building
1000 Liberty Avenue
Pittsburgh, Pennsylvania 15222-4186
Phone: (412) 395-7155
Fax: (412) 644-4211

U.S. Army Corps of Engineers, Louisville District
ATTN: CELRL-RD, Room 752
600 Dr. Martin Luther King Jr. Place
Louisville, Kentucky 40202-0059
Phone: (502) 315-6733
Fax: (502) 315-6677

C. Nationwide Permit General Conditions:

Note: To qualify for NWP authorization, the prospective permittee must comply with the following general conditions, as applicable, in addition to any regional or case-specific conditions imposed by the division engineer or district engineer. Prospective permittees should contact the appropriate Corps district office to determine if regional conditions have been imposed on an NWP. Prospective permittees should also contact the appropriate Corps district office to determine the status of Clean Water Act Section 401 water quality certification and/or Coastal Zone Management Act consistency for an NWP. Every person who may wish to obtain permit authorization under one or more NWPs, or who is currently relying on an existing or prior permit authorization under one or more NWPs, has been and is on notice that all of the provisions of 33 CFR 330.1 through 330.6 apply to every NWP authorization. Note especially 33 CFR 330.5 relating to the modification, suspension, or revocation of any NWP authorization.

1. Navigation.

- a. No activity may cause more than a minimal adverse effect on navigation.
- b. Any safety lights and signals prescribed by the U.S. Coast Guard, through regulations or otherwise, must be installed and maintained at the permittee's expense on authorized facilities in navigable waters of the United States.
- c. The permittee understands and agrees that, if future operations by the United States require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his or her authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the United States. No claim shall be made against the

United States on account of any such removal or alteration.

2. Aquatic Life Movements. No activity may substantially disrupt the necessary life cycle movements of those species of aquatic life indigenous to the waterbody, including those species that normally migrate through the area, unless the activity's primary purpose is to impound water. All permanent and temporary crossings of waterbodies shall be suitably culverted, bridged, or otherwise designed and constructed to maintain low flows to sustain the movement of those aquatic species. If a bottomless culvert cannot be used, then the crossing should be designed and constructed to minimize adverse effects to aquatic life movements.

3. Spawning Areas. Activities in spawning areas during spawning seasons must be avoided to the maximum extent practicable. Activities that result in the physical destruction (e.g., through excavation, fill, or downstream smothering by substantial turbidity) of an important spawning area are not authorized.

4. Migratory Bird Breeding Areas. Activities in waters of the United States that serve as breeding areas for migratory birds must be avoided to the maximum extent practicable.

5. Shellfish Beds. No activity may occur in areas of concentrated shellfish populations, unless the activity is directly related to a shellfish harvesting activity authorized by NWP 4 and 48, or is a shellfish seeding or habitat restoration activity authorized by NWP 27.

6. Suitable Material. No activity may use unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.). Material used for construction or discharged must be free from toxic pollutants in toxic amounts (see section 307 of the Clean Water Act).

7. Water Supply Intakes. No activity may occur in the proximity of a public water supply intake, except where the activity is for the repair or improvement of public water supply intake structures or adjacent bank stabilization.

8. Adverse Effects From Impoundments. If the activity creates an impoundment of water, adverse effects to the aquatic system due to accelerating the passage of water, and/or restricting its flow must be minimized to the maximum extent practicable.

9. Management of Water Flows. To the maximum extent practicable, the preconstruction course, condition, capacity, and location of open waters must be maintained for each activity, including stream channelization, storm water management activities, and temporary and permanent road crossings, except as provided below.

The activity must be constructed to withstand expected high flows. The activity must not restrict or impede the passage of normal or high flows, unless the primary purpose of the activity is to impound water or manage high flows. The activity may alter the preconstruction course, condition, capacity, and location of open waters if it benefits the

aquatic environment (e.g., stream restoration or relocation activities).

10. Fills Within 100-Year Floodplains. The activity must comply with applicable FEMA-approved state or local floodplain management requirements.

11. Equipment. Heavy equipment working in wetlands or mudflats must be placed on mats, or other measures must be taken to minimize soil disturbance.

12. Soil Erosion and Sediment Controls. Appropriate soil erosion and sediment controls must be used and maintained in effective operating condition during construction, and all exposed soil and other fills, as well as any work below the ordinary high water mark or high tide line, must be permanently stabilized at the earliest practicable date. Permittees are encouraged to perform work within waters of the United States during periods of low-flow or no-flow, or during low tides.

13. Removal of Temporary Structures and Fills. Temporary structures must be removed, to the maximum extent practicable, after their use has been discontinued. Temporary fills must be removed in their entirety and the affected areas returned to preconstruction elevations. The affected areas must be revegetated, as appropriate.

14. Proper Maintenance. Any authorized structure or fill shall be properly maintained, including maintenance to ensure public safety and compliance with applicable NWP general conditions, as well as any activity-specific conditions added by the district engineer to an NWP authorization.

15. Single and Complete Project. The activity must be a single and complete project. The same NWP cannot be used more than once for the same single and complete project.

16. Wild and Scenic Rivers.

- a. No NWP activity may occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study
- b. river” for possible inclusion in the system while the river is in an official study status, unless the appropriate Federal agency with direct management responsibility for such river, has determined in writing that the proposed activity will not adversely affect the Wild and Scenic River designation or study status.
- c. If a proposed NWP activity will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the permittee must submit a pre-construction notification (see general condition 32). The district engineer will coordinate the PCN with the Federal agency with direct management responsibility for that river. Permittees shall not begin the NWP activity until notified by

the district engineer that the Federal agency with direct management responsibility for that river has determined in writing that the proposed NWP activity will not adversely affect the Wild and Scenic River designation or study status.

- d. Information on Wild and Scenic Rivers may be obtained from the appropriate Federal land management agency responsible for the designated Wild and Scenic River or study river (e.g., National Park Service, U.S. Forest Service, Bureau of Land Management, U.S. Fish and Wildlife Service). Information on these rivers is also available at: <http://www.rivers.gov/>.

17. Tribal Rights. No activity or its operation may impair reserved tribal rights, including, but not limited to, reserved water rights and treaty fishing and hunting rights.

18. Endangered Species.

- a. No activity is authorized under any NWP which is likely to directly or indirectly jeopardize the continued existence of a threatened or endangered species or a
- b. species proposed for such designation, as identified under the Federal Endangered Species Act (ESA), or which will directly or indirectly destroy or adversely modify designated critical habitat or critical habitat proposed for such designation. No activity is authorized under any NWP which “may affect” a listed species or critical habitat, unless ESA section 7 consultation addressing the consequences of the proposed activity on listed species or critical habitat has been completed. See 50 CFR 402.02 for the definition of “effects of the action” for the purposes of ESA section 7 consultation, as well as 50 CFR 402.17, which provides further explanation under ESA section 7 regarding “activities that are reasonably certain to occur” and “consequences caused by the proposed action.”
- c. Federal agencies should follow their own procedures for complying with the requirements of the ESA (see 33 CFR 330.4(f)(1)). If pre-construction notification is required for the proposed activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation has not been submitted, additional ESA section 7 consultation may be necessary for the activity and the respective federal agency would be responsible for fulfilling its obligation under section 7 of the ESA.
- d. Non-federal permittees must submit a pre-construction notification to the district engineer if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat or critical habitat proposed for such designation, and shall not begin work on the activity until notified by the

district engineer that the requirements of the ESA have been satisfied and that the activity is authorized. For activities that might affect Federally-listed endangered or threatened species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation), the pre-construction notification must include the name(s) of the endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or that utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. The district engineer will determine whether the proposed activity “may affect” or will have “no effect” to listed species and designated critical habitat and will notify the non-Federal applicant of the Corps’ determination within 45 days of receipt of a complete pre-construction notification. For activities where the non-Federal applicant has identified listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) that might be affected or is in the vicinity of the activity, and has so notified the Corps, the applicant shall not begin work until the Corps has provided notification that the proposed activity will have “no effect” on listed species (or species proposed for listing or designated critical habitat (or critical habitat proposed for such designation), or until ESA section 7 consultation or conference has been completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.

- e. As a result of formal or informal consultation or conference with the FWS or NMFS the district engineer may add species-specific permit conditions to the NWP.
- f. Authorization of an activity by an NWP does not authorize the “take” of a threatened or endangered species as defined under the ESA. In the absence of separate authorization (e.g., an ESA Section 10 Permit, a Biological Opinion with “incidental take” provisions, etc.) from the FWS or the NMFS, the Endangered Species Act prohibits any person subject to the jurisdiction of the United States to take a listed species, where “take” means to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. The word “harm” in the definition of “take” means an act which actually kills or injures wildlife. Such an act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.
- g. If the non-federal permittee has a valid ESA section 10(a)(1)(B) incidental take permit with an approved Habitat Conservation Plan for a project or a group of projects that includes the proposed NWP activity, the non-federal applicant should provide a copy of that ESA section 10(a)(1)(B) permit with the PCN required by paragraph (c) of this general condition. The district engineer will coordinate with the agency that issued the ESA section 10(a)(1)(B) permit to determine whether the proposed NWP

activity and the associated incidental take were considered in the internal ESA section 7 consultation conducted for the ESA section 10(a)(1)(B) permit. If that coordination results in concurrence from the agency that the proposed NWP activity and the associated incidental take were considered in the internal ESA section 7 consultation for the ESA section 10(a)(1)(B) permit, the district engineer does not need to conduct a separate ESA section 7 consultation for the proposed NWP activity. The district engineer will notify the non-federal applicant within 45 days of receipt of a complete pre-construction notification whether the ESA section 10(a)(1)(B) permit covers the proposed NWP

- h. activity or whether additional ESA section 7 consultation is required.
- i. Information on the location of threatened and endangered species and their critical habitat can be obtained directly from the offices of the FWS and NMFS or their world wide web pages at <http://www.fws.gov/> or <http://www.fws.gov/ipac> and <http://www.nmfs.noaa.gov/pr/species/esa/> respectively.

19. Migratory Birds and Bald and Golden Eagles. The permittee is responsible for ensuring that an action authorized by an NWP complies with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act. The permittee is responsible for contacting the appropriate local office of the U.S. Fish and Wildlife Service to determine what measures, if any, are necessary or appropriate to reduce adverse effects to migratory birds or eagles, including whether “incidental take” permits are necessary and available under the Migratory Bird Treaty Act or Bald and Golden Eagle Protection Act for a particular activity.

20. Historic Properties.

- a. No activity is authorized under any NWP which may have the potential to cause effects to properties listed, or eligible for listing, in the National Register of Historic Places until the requirements of Section 106 of the National Historic Preservation Act (NHPA) have been satisfied.
- b. Federal permittees should follow their own procedures for complying with the requirements of section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)(1)). If preconstruction notification is required for the proposed NWP activity, the Federal permittee must provide the district engineer with the appropriate documentation to demonstrate compliance with those requirements. The district engineer will verify that the appropriate documentation has been submitted. If the appropriate documentation is not submitted, then additional consultation under section 106 may be necessary. The respective federal agency is responsible for fulfilling its obligation to comply with section 106.
- c. Non-federal permittees must submit a pre-construction notification to the district engineer if the NWP activity might have the potential to cause effects to any historic properties listed on, determined to be eligible for listing on, or potentially eligible for listing on the National Register of Historic Places,

- including previously unidentified properties. For such activities, the preconstruction notification must state which historic properties might have the potential to be affected by the proposed NWP activity or include a vicinity map indicating the location of the historic properties or the potential for the presence of historic properties. Assistance regarding information on the location of, or potential for, the presence of historic properties can be sought from the State Historic Preservation Officer, Tribal Historic Preservation Officer, or designated tribal representative, as appropriate, and the National Register of Historic Places (see 33 CFR 330.4(g)). When reviewing preconstruction notifications, district engineers will comply with the current procedures for addressing the requirements of section 106 of the National Historic Preservation Act. The district engineer shall make a reasonable and good faith effort to carry out appropriate identification efforts commensurate with potential impacts, which may include background research, consultation, oral history interviews, sample field investigation, and/or field survey. Based on the information submitted in the PCN and these identification efforts, the district engineer shall determine whether the proposed NWP activity has the potential to cause effects on the historic properties. Section 106 consultation is not required when the district engineer determines that the activity does not have the potential to cause effects on historic properties (see 36 CFR 800.3(a)). Section 106 consultation is required when the district engineer determines that the activity has the potential to cause effects on historic properties. The district engineer will conduct consultation with consulting parties identified under 36 CFR 800.2(c) when he or she makes any of the following effect determinations for the purposes of section 106 of the NHPA: No historic properties affected, no adverse effect, or adverse effect.
- d. Where the non-Federal applicant has identified historic properties on which the proposed NWP activity might have the potential to cause effects and has so notified the Corps, the non-Federal applicant shall not begin the activity until notified by the district engineer either that the activity has no potential to cause effects to historic properties or that NHPA section 106 consultation has been completed. For non-federal permittees, the district engineer will notify the prospective permittee within 45 days of receipt of a complete preconstruction notification whether NHPA section 106 consultation is required. If NHPA section 106 consultation is required, the district engineer will notify the non-Federal applicant that he or she cannot begin the activity until section 106 consultation is completed. If the non-Federal applicant has not heard back from the Corps within 45 days, the applicant must still wait for notification from the Corps.
 - e. Prospective permittees should be aware that section 110k of the NHPA (54 U.S.C. 306113) prevents the Corps from granting a permit or other assistance to an applicant who, with intent to avoid the requirements of section 106 of the NHPA, has intentionally significantly adversely affected a historic property to which the permit would relate, or having legal power to prevent it, allowed such significant adverse effect to occur, unless the Corps, after consultation with the Advisory Council on Historic Preservation (ACHP), determines that

circumstances justify granting such assistance despite the adverse effect created or permitted by the applicant. If circumstances justify granting the assistance, the Corps is required to notify the ACHP and provide documentation specifying the circumstances, the degree of damage to the integrity of any historic properties affected, and proposed mitigation. This documentation must include any views obtained from the applicant, SHPO/THPO, appropriate Indian tribes if the undertaking occurs on or affects historic properties on tribal lands or affects properties of interest to those tribes, and other parties known to have a legitimate interest in the impacts to the permitted activity on historic properties.

21. Discovery of Previously Unknown Remains and Artifacts. Permittees that discover any previously unknown historic, cultural or archeological remains and artifacts while accomplishing the activity authorized by an NWP, they must immediately notify the district engineer of what they have found, and to the maximum extent practicable, avoid construction activities that may affect the remains and artifacts until the required coordination has been completed. The district engineer will initiate the Federal, Tribal, and state coordination required to determine if the items or remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.

22. Designated Critical Resource Waters. Critical resource waters include, NOAA-managed marine sanctuaries and marine monuments, and National Estuarine Research Reserves. The district engineer may designate, after notice and opportunity for public comment, additional waters officially designated by a state as having particular environmental or ecological significance, such as outstanding national resource waters or state natural heritage sites. The district engineer may also designate additional critical resource waters after notice and opportunity for public comment.

(a) Discharges of dredged or fill material into waters of the United States are not authorized by NWPs 7, 12, 14, 16, 17, 21, 29, 31, 35, 39, 40, 42, 43, 44, 49, 50, 51, 52, 57 and 58 for any activity within, or directly affecting, critical resource waters, including wetlands adjacent to such waters.

(b) For NWPs 3, 8, 10, 13, 15, 18, 19, 22, 23, 25, 27, 28, 30, 33, 34, 36, 37, 38, and 54, notification is required in accordance with general condition 32, for any activity proposed by permittees in the designated critical resource waters including wetlands adjacent to those waters. The district engineer may authorize activities under these NWPs only after she or he determines that the impacts to the critical resource waters will be no more than minimal.

23. Mitigation. The district engineer will consider the following factors when determining appropriate and practicable mitigation necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal:

- a. The activity must be designed and constructed to avoid and minimize adverse effects, both temporary and permanent, to waters of the United States to the maximum extent practicable at the project site (i.e., on site).

- b. Mitigation in all its forms (avoiding, minimizing, rectifying, reducing, or compensating for resource losses) will be required to the extent necessary to ensure that the individual and cumulative adverse environmental effects are no more than minimal.
- c. Compensatory mitigation at a minimum one-for-one ratio will be required for all wetland losses that exceed 1/10-acre and require preconstruction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. For wetland losses of 1/10-acre or less that require preconstruction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects.
- d. Compensatory mitigation at a minimum one-for-one ratio will be required for all losses of stream bed that exceed 3/100-acre and require preconstruction notification, unless the district engineer determines in writing that either some other form of mitigation would be more environmentally appropriate or the adverse environmental effects of the proposed activity are no more than minimal, and provides an activity-specific waiver of this requirement. This compensatory mitigation requirement may be satisfied through the restoration or enhancement of riparian areas next to streams in accordance with paragraph (e) of this general condition. For losses of stream bed of 3/100-acre or less that require preconstruction notification, the district engineer may determine on a case-by-case basis that compensatory mitigation is required to ensure that the activity results in only minimal adverse environmental effects. Compensatory mitigation for losses of streams should be provided, if practicable, through stream rehabilitation, enhancement, or preservation, since streams are difficult to-replace resources (see 33 CFR 332.3(e)(3)).
- e. Compensatory mitigation plans for NWP activities in or near streams or other open waters will normally include a requirement for the restoration or enhancement, maintenance, and legal protection (e.g., conservation easements) of riparian areas next to open waters. In some cases, the restoration or maintenance/protection of riparian areas may be the only compensatory mitigation required. If restoring riparian areas involves planting vegetation, only native species should be planted. The width of the required riparian area will address documented water quality or aquatic habitat loss concerns. Normally, the riparian area will be 25 to 50 feet wide on each side of the stream, but the district engineer may require slightly wider riparian areas to address documented water quality or habitat loss concerns. If it is not possible to restore or maintain/protect a riparian area on both sides of a stream, or if the waterbody is a lake or coastal waters, then restoring or maintaining/protecting a riparian area along a single bank or shoreline may be sufficient. Where both wetlands and open waters exist on the project site, the district engineer will determine the appropriate compensatory mitigation (e.g., riparian areas and/or wetlands compensation) based on what is best for the

aquatic environment on a watershed basis. In cases where riparian areas are determined to be the most appropriate form of minimization or compensatory mitigation, the district engineer may waive or reduce the requirement to provide wetland compensatory mitigation for wetland losses.

- f. Compensatory mitigation projects provided to offset losses of aquatic resources must comply with the applicable provisions of 33 CFR part 332.
 1. The prospective permittee is responsible for proposing an appropriate compensatory mitigation option if compensatory mitigation is necessary to ensure that the activity results in no more than minimal adverse environmental effects. For the NWPs, the preferred mechanism for providing compensatory mitigation is mitigation bank credits or in-lieu fee program credits (see 33 CFR 332.3(b)(2) and (3)). However, if an appropriate number and type of mitigation bank or in-lieu credits are not available at the time the PCN is submitted to the district engineer, the
 2. district engineer may approve the use of permittee-responsible mitigation.
 3. The amount of compensatory mitigation required by the district engineer must be sufficient to ensure that the authorized activity results in no more than minimal individual and cumulative adverse environmental effects (see 33 CFR 330.1(e)(3)). (See also 33 CFR 332.3(f).)
 4. Since the likelihood of success is greater and the impacts to potentially valuable uplands are reduced, aquatic resource restoration should be the first compensatory mitigation option
 5. considered for permittee-responsible mitigation.
 6. If permittee-responsible mitigation is the proposed option, the prospective permittee is responsible for submitting a mitigation plan. A conceptual or detailed mitigation plan may be used by the district engineer to make the decision on the NWP verification request, but a final mitigation plan that addresses the applicable requirements of 33 CFR 332.4(c)(2) through (14) must be approved by the district engineer before the permittee begins work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation (see 33 CFR 332.3(k)(3)). If permittee responsible mitigation is the proposed option, and the proposed compensatory mitigation site is located on land in which another federal agency holds an easement, the district engineer will coordinate with that federal agency to determine if proposed compensatory mitigation project is compatible with the terms of the easement.
 7. If mitigation bank or in-lieu fee program credits are the proposed option, the mitigation plan needs to address only the baseline conditions at the impact site and the number of credits to be provided

(see 33 CFR 332.4(c)(1)(ii)).

8. Compensatory mitigation requirements (e.g., resource type and amount to be provided as compensatory mitigation, site protection, ecological performance standards, monitoring requirements) may be addressed through conditions added to the NWP authorization, instead of components of a compensatory mitigation plan (see 33 CFR 332.4(c)(1)(ii)).
- g. Compensatory mitigation will not be used to increase the acreage losses allowed by the acreage limits of the NWPs. For example, if an NWP has an acreage limit of 1/2-acre, it cannot be used to authorize any NWP activity resulting in the loss of greater than 1/2-acre of waters of the United States, even if compensatory mitigation is provided that replaces or restores some of the lost waters. However, compensatory mitigation can and should be used, as necessary, to ensure that an NWP activity already meeting the established acreage limits also satisfies the no more than minimal impact requirement for the NWPs.
- h. (h) Permittees may propose the use of mitigation banks, in-lieu fee programs, or permittee-responsible mitigation. When developing a compensatory mitigation proposal, the permittee must consider appropriate and practicable options consistent with the framework at 33 CFR 332.3(b). For activities resulting in the loss of marine or estuarine resources, permittee responsible mitigation may be environmentally preferable if there are no mitigation banks or in-lieu fee programs in the area that have marine or estuarine credits available for sale or transfer to the permittee. For permittee responsible mitigation, the special conditions of the NWP verification must clearly indicate the party or parties responsible for the implementation and performance of the compensatory mitigation project, and, if required, its long-term management.
- i. Where certain functions and services of waters of the United States are permanently adversely affected by a regulated activity, such as discharges of dredged or fill material into waters of the United States that will convert a forested or scrub-shrub wetland to a herbaceous wetland in a permanently maintained utility line right-of-way, mitigation may be required to reduce the adverse environmental effects of the activity to the no more than minimal level.

24. Safety of Impoundment Structures. To ensure that all impoundment structures are safely designed, the district engineer may require non-Federal applicants to demonstrate that the structures comply with established state or federal, dam safety criteria or have been designed by qualified persons. The district engineer may also require documentation that the design has been independently reviewed by similarly qualified persons, and appropriate modifications made to ensure safety.

25. Water Quality.

- a. Where the certifying authority (state, authorized tribe, or EPA, as appropriate)

- has not previously certified compliance of an NWP with CWA section 401, a CWA section 401 water quality certification for the proposed discharge must be obtained or waived (see 33 CFR 330.4(c)). If the permittee cannot comply with all of the conditions of a water quality certification previously issued by certifying authority for the issuance of the NWP, then the permittee must obtain a water quality certification or waiver for the proposed discharge in order for the activity to be authorized by an NWP.
- b. If the NWP activity requires preconstruction notification and the certifying authority has not previously certified compliance of an NWP with CWA section 401, the proposed discharge is not authorized by an NWP until water quality certification is obtained or waived. If the certifying authority issues a water quality certification for the proposed discharge, the permittee must submit a copy of the certification to the district engineer. The discharge is not authorized by an NWP until the district engineer has notified the permittee that the water quality certification requirement has been satisfied by the issuance of a water quality certification or a waiver.
 - c. The district engineer or certifying authority may require additional water quality management measures to ensure that the authorized activity does not result in more than minimal degradation of water quality.

26. Coastal Zone Management. In coastal states where an NWP has not previously received a state coastal zone management consistency concurrence, an individual state coastal zone management consistency concurrence must be obtained, or a presumption of concurrence must occur (see 33 CFR 330.4(d)). If the permittee cannot comply with all of the conditions of a coastal zone management consistency concurrence previously issued by the state, then the permittee must obtain an individual coastal zone management consistency concurrence or presumption of concurrence in order for the activity to be authorized by an NWP. The district engineer or a state may require additional measures to ensure that the authorized activity is consistent with state coastal zone management requirements.

27. Regional and Case-By-Case Conditions. The activity must comply with any regional conditions that may have been added by the Division Engineer (see 33 CFR 330.4(e)) and with any case specific conditions added by the Corps or by the state, Indian Tribe, or U.S. EPA in its CWA section 401 Water Quality Certification, or by the state in its Coastal Zone Management Act consistency determination.

28. Use of Multiple Nationwide Permits. The use of more than one NWP for a single and complete project is authorized, subject to the following restrictions:

- a. If only one of the NWPs used to authorize the single and complete project has a specified acreage limit, the acreage loss of waters of the United States cannot exceed the acreage limit of the NWP with the highest specified acreage limit. For example, if a road crossing over tidal waters is constructed under NWP 14, with associated bank stabilization authorized by NWP 13, the maximum acreage loss of waters of the United States for

the total project cannot exceed 1/3-acre.

- b. If one or more of the NWP's used to authorize the single and complete project has specified acreage limits, the acreage loss of waters of the United States authorized by those NWP's cannot exceed their respective specified acreage limits. For example, if a commercial development is constructed under NWP 39, and the single and complete project includes the filling of an upland ditch authorized by NWP 46, the maximum acreage loss of waters of the United States for the commercial development under NWP 39 cannot exceed 1/2-acre, and the total acreage loss of waters of United States due to the NWP 39 and 46 activities cannot exceed 1 acre.

29. Transfer of Nationwide Permit Verifications. If the permittee sells the property associated with a nationwide permit verification, the permittee may transfer the nationwide permit verification to the new owner by submitting a letter to the appropriate Corps district office to validate the transfer. A copy of the nationwide permit verification must be attached to the letter, and the letter must contain the following statement and signature:

“When the structures or work authorized by this nationwide permit are still in existence at the time the property is transferred, the terms and conditions of this nationwide permit, including any special conditions, will continue to be binding on the new owner(s) of the property. To validate the transfer of this nationwide permit and the associated liabilities associated with compliance with its terms and conditions, have the transferee sign and date below.”

(Transferee)

(Date)

30. Compliance Certification. Each permittee who receives an NWP verification letter from the Corps must provide a signed certification documenting completion of the authorized activity and implementation of any required compensatory mitigation. The success of any required permittee-responsible mitigation, including the achievement of ecological performance standards, will be addressed separately by the district engineer. The Corps will provide the permittee the certification document with the NWP verification letter. The certification document will include:

- a. A statement that the authorized activity was done in accordance with the NWP authorization, including any general, regional, or activity-specific conditions;
- b. A statement that the implementation of any required compensatory mitigation was completed in accordance with the permit conditions. If credits from a mitigation bank or in-lieu fee program are used to satisfy the compensatory mitigation requirements, the certification must include the documentation required by 33 CFR 332.3(l)(3) to confirm that the permittee secured the

- appropriate number and resource type of credits; and
- c. The signature of the permittee certifying the completion of the activity and mitigation. The completed certification document must be submitted to the district engineer within 30 days of completion of the authorized activity or the implementation of any required compensatory mitigation, whichever occurs later.

31. Activities Affecting Structures or Works Built by the United States. If an NWP activity also requires review by, or permission from, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers (USACE) federally authorized Civil Works project (a "USACE project"), the prospective permittee must submit a pre-construction notification. See paragraph (b)(10) of general condition 32. An activity that requires section 408 permission and/or review is not authorized by an NWP until the appropriate Corps office issues the section 408 permission or completes its review to alter, occupy, or use the USACE project, and the district engineer issues a written NWP verification.

32. Pre-Construction Notification.

- a. **Timing.** Where required by the terms of the NWP, the prospective permittee must notify the district engineer by submitting a pre-construction notification (PCN) as early as possible. The district engineer must determine if the PCN is complete within 30 calendar days of the date of receipt and, if the PCN is determined to be incomplete, notify the prospective permittee within that 30 day period to request the additional information necessary to make the PCN complete. The request must specify the information needed to make the PCN complete. As a general rule, district engineers will request additional information necessary to make the PCN complete only once. However, if the prospective permittee does not provide all of the requested information, then the district engineer will notify the prospective permittee that the PCN is still incomplete and the PCN review process will not commence until all of the requested information has been received by the district engineer. The prospective permittee shall not begin the activity until either:
 1. He or she is notified in writing by the district engineer that the activity may proceed under the NWP with any special conditions imposed by the district or division engineer; or
 2. 45 calendar days have passed from the district engineer's receipt of the complete PCN and the prospective permittee has not received written notice from the district or division engineer. However, if the permittee was required to notify the Corps pursuant to general condition 18 that listed species or critical habitat might be affected or are in the vicinity of the activity, or to notify the Corps pursuant to general condition 20 that the activity might have the potential to cause effects to historic properties, the permittee cannot begin the activity until receiving written notification from the Corps that there is "no

effect” on listed species or “no potential to cause effects” on historic properties, or that any consultation required under Section 7 of the Endangered Species Act (see 33 CFR 330.4(f)) and/or section 106 of the National Historic Preservation Act (see 33 CFR 330.4(g)) has been completed. If the proposed activity requires a written waiver to exceed specified limits of an NWP, the permittee may not begin the activity until the district engineer issues the waiver. If the district or division engineer notifies the permittee in writing that an individual permit is required within 45 calendar days of receipt of a complete PCN, the permittee cannot begin the activity until an individual permit has been obtained. Subsequently, the permittee’s right to proceed under the NWP may be modified, suspended, or revoked only in accordance with the procedure set forth in 33 CFR 330.5(d)(2).

- b. **Contents of Pre-Construction Notification:** The PCN must be in writing and include the following information:
1. Name, address and telephone numbers of the prospective permittee;
 2. Location of the proposed activity;
 3. Identify the specific NWP or NWP(s) the prospective permittee wants to use to authorize the proposed activity;
 4.
 - i. A description of the proposed activity; the activity’s purpose; direct and indirect adverse environmental effects the activity would cause, including the anticipated amount of loss of wetlands, other special aquatic sites, and other waters expected to result from the NWP activity, in acres, linear feet, or other appropriate unit of measure; a description of any proposed mitigation measures intended to reduce the adverse environmental effects caused by the proposed activity; and any other NWP(s), regional general permit(s), or individual permit(s) used or intended to be used to authorize any part of the proposed project or any related activity, including other separate and distant crossings for linear projects that require Department of the Army authorization but do not require pre-construction notification. The description of the proposed activity and any proposed mitigation measures should be sufficiently detailed to allow the district engineer to determine that the adverse environmental effects of the activity will be no more than minimal and to determine the need for compensatory mitigation or other mitigation measures.
 - ii. For linear projects where one or more single and complete crossings require pre-construction notification, the PCN must include the quantity of anticipated losses of wetlands, other special aquatic sites, and other waters for each single and complete crossing of those wetlands, other special aquatic sites, and other waters (including those single and complete crossings

authorized by an NWP but do not require PCNs). This information will be used by the district engineer to evaluate the cumulative adverse environmental effects of the proposed linear project, and does not change those non-PCN NWP activities into NWP PCNs.

- iii. Sketches should be provided when necessary to show that the activity complies with the terms of the NWP. (Sketches usually clarify the activity and when provided results in a quicker
 - iv. decision. Sketches should contain sufficient detail to provide an illustrative description of the proposed activity (e.g., a conceptual plan), but do not need to be detailed engineering plans);
5. The PCN must include a delineation of wetlands, other special aquatic sites, and other waters, such as lakes and ponds, and perennial and intermittent streams, on the project site. Wetland delineations must be prepared in accordance with the current method required by the Corps. The permittee may ask the Corps to delineate the special aquatic sites and other waters on the project site, but there may be a delay if the Corps does the delineation, especially if the project site is large or contains many wetlands, other special aquatic sites, and other waters. Furthermore, the 45-day period will not start until the delineation has been submitted to or completed by the Corps, as appropriate;
 6. If the proposed activity will result in the loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed and a PCN is required, the prospective permittee must submit a statement describing how the mitigation requirement will be satisfied, or explaining why the adverse environmental effects are no more than minimal and why compensatory mitigation should not be required. As an alternative, the prospective permittee may submit a conceptual or detailed mitigation plan.
 7. For non-federal permittees, if any listed species (or species proposed for listing) or designated critical habitat (or critical habitat proposed for such designation) might be affected or is in the vicinity of the activity, or if the activity is located in designated critical habitat (or critical habitat proposed for such designation), the PCN must include the name(s) of those endangered or threatened species (or species proposed for listing) that might be affected by the proposed activity or utilize the designated critical habitat (or critical habitat proposed for such designation) that might be affected by the proposed activity. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with the Endangered Species Act;
 8. For non-federal permittees, if the NWP activity might have the potential to cause effects to a historic property listed on, determined to be eligible for listing on, or potentially eligible for listing on, the National Register of Historic Places, the PCN must state which historic property

might have the potential to be affected by the proposed activity or include a vicinity map indicating the location of the historic property. For NWP activities that require pre-construction notification, Federal permittees must provide documentation demonstrating compliance with section 106 of the National Historic Preservation Act;

9. For an activity that will occur in a component of the National Wild and Scenic River System, or in a river officially designated by Congress as a “study river” for possible inclusion in the system while the river is in an official study status, the PCN must identify the Wild and Scenic River or the “study river” (see general condition 16); and
 10. For an NWP activity that requires permission from, or review by, the Corps pursuant to 33 U.S.C. 408 because it will alter or temporarily or permanently occupy or use a U.S. Army Corps of Engineers federally authorized civil works project, the pre-construction notification must include a statement confirming that the project proponent has submitted a written request for section 408 permission from, or review by, the Corps office having jurisdiction over that USACE project.
- c. **Form of Pre-Construction Notification:** The nationwide permit pre-construction notification form (Form ENG 6082) should be used for NWP PCNs. A letter containing the required information may also be used. Applicants may provide electronic files of PCNs and supporting materials if the district engineer has established tools and procedures for electronic submittals.
- d. **Agency Coordination:**
1. The district engineer will consider any comments from Federal and state agencies concerning the proposed activity’s compliance with the terms and conditions of the NWPs and the need for mitigation to reduce the activity’s adverse environmental effects so that they are no more than minimal.
 2. Agency coordination is required for:
 - i. All NWP activities that require pre-construction notification and result in the loss of greater than 1/2-acre of waters of the United States;
 - ii. NWP 13 activities in excess of 500 linear feet, fills greater than one cubic yard per running foot, or involve discharges of dredged or fill material into special aquatic sites; and
 - iii. NWP 54 activities in excess of 500 linear feet, or that extend into the waterbody more than 30 feet from the mean low water line in tidal waters or the ordinary high water mark in the Great Lakes.
 3. When agency coordination is required, the district engineer will immediately provide (e.g., via email, facsimile transmission, overnight mail, or other expeditious manner) a copy of the complete PCN to the appropriate Federal or state offices (FWS, state natural resource or water

quality agency, EPA, and, if appropriate, the NMFS). With the exception of NWP 37, these agencies will have 10 calendar days from the date the material is transmitted to notify the district engineer via telephone, facsimile transmission, or email that they intend to provide substantive, site-specific comments. The comments must explain why the agency believes the adverse environmental effects will be more than minimal. If so contacted by an agency, the district engineer will wait an additional 15 calendar days before making a decision on the preconstruction notification. The district engineer will fully consider agency comments received within the specified time frame concerning the proposed activity's compliance with the terms and conditions of the NWPs, including the need for mitigation to ensure that the net adverse environmental effects of the proposed activity are no more than minimal. The district engineer will provide no response to the resource agency, except as provided below. The district engineer will indicate in the administrative record associated with each pre-construction notification that the resource agencies' concerns were considered. For NWP 37, the emergency watershed protection and rehabilitation activity may proceed immediately in cases where there is an unacceptable hazard to life or a significant loss of property or economic hardship will occur. The district engineer will consider any comments received to decide whether the NWP 37 authorization should be modified, suspended, or revoked in accordance with the procedures at 33 CFR 330.5.

4. In cases of where the prospective permittee is not a Federal agency, the district engineer will provide a response to NMFS within 30 calendar days of receipt of any Essential Fish Habitat conservation recommendations, as required by section 305(b)(4)(B) of the Magnuson-Stevens Fishery Conservation and Management Act.
5. Applicants are encouraged to provide the Corps with either electronic files or multiple copies of preconstruction notifications to expedite agency coordination.

D. District Engineer's Decision

1. In reviewing the PCN for the proposed activity, the district engineer will determine whether the activity authorized by the NWP will result in more than minimal individual or cumulative adverse environmental effects or may be contrary to the public interest. If a project proponent requests authorization by a specific NWP, the district engineer should issue the NWP verification for that activity if it meets the terms and conditions of that NWP, unless he or she determines, after considering mitigation, that the proposed activity will result in more than minimal individual and cumulative adverse effects on the aquatic environment and other aspects of the public interest and exercises discretionary authority to require an individual permit for the proposed activity. For a linear project, this determination will include an evaluation of the single and complete crossings of waters of the United States that require PCNs to determine whether they individually satisfy

the terms and conditions of the NWP(s), as well as the cumulative effects caused by all of the crossings of waters of the United States authorized by an NWP. If an applicant requests a waiver of an applicable limit, as provided for in NWPs 13, 36, or 54, the district engineer will only grant the waiver upon a written determination that the NWP activity will result in only minimal individual and cumulative adverse environmental effects.

2. When making minimal adverse environmental effects determinations the district engineer will consider the direct and indirect effects caused by the NWP activity. He or she will also consider the cumulative adverse environmental effects caused by activities authorized by an NWP and whether those cumulative adverse environmental effects are no more than minimal. The district engineer will also consider site specific factors, such as the environmental setting in the vicinity of the NWP activity, the type of resource that will be affected by the NWP activity, the functions provided by the aquatic resources that will be affected by the NWP activity, the degree or magnitude to which the aquatic resources perform those functions, the extent that aquatic resource functions will be lost as a result of the NWP activity (e.g., partial or complete loss), the duration of the adverse effects (temporary or permanent), the importance of the aquatic resource functions to the region (e.g., watershed or ecoregion), and mitigation required by the district engineer. If an appropriate functional or condition assessment method is available and practicable to use, that assessment method may be used by the district engineer to assist in the minimal adverse environmental effects determination. The district engineer may add case-specific special conditions to the NWP authorization to address site-specific environmental concerns.
3. If the proposed activity requires a PCN and will result in a loss of greater than 1/10-acre of wetlands or 3/100-acre of stream bed, the prospective permittee should submit a mitigation proposal with the PCN. Applicants may also propose compensatory mitigation for NWP activities with smaller impacts, or for impacts to other types of waters. The district engineer will consider any proposed compensatory mitigation or other mitigation measures the applicant has included in the proposal in determining whether the net adverse environmental effects of the proposed activity are no more than minimal. The compensatory mitigation proposal may be either conceptual or detailed. If the district engineer determines that the activity complies with the terms and conditions of the NWP and that the adverse environmental effects are no more than minimal, after considering mitigation, the district engineer will notify the permittee and include any activity-specific conditions in the NWP verification the district engineer deems necessary. Conditions for compensatory mitigation requirements must comply with the appropriate provisions at 33 CFR 332.3(k). The district engineer must approve the final mitigation plan before the permittee commences work in waters of the United States, unless the district engineer determines that prior approval of the final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation. If the prospective permittee

elects to submit a compensatory mitigation plan with the PCN, the district engineer will expeditiously review the proposed compensatory mitigation plan. The district engineer must review the proposed compensatory mitigation plan within 45 calendar days of receiving a complete PCN and determine whether the proposed mitigation would ensure that the NWP activity results in no more than minimal adverse environmental effects. If the net adverse environmental effects of the NWP activity (after consideration of the mitigation proposal) are determined by the district engineer to be no more than minimal, the district engineer will provide a timely written response to the applicant. The response will state that the NWP activity can proceed under the terms and conditions of the NWP, including any activity-specific conditions added to the NWP authorization by the district engineer.

4. If the district engineer determines that the adverse environmental effects of the proposed activity are more than minimal, then the district engineer will notify the applicant either: (a) That the activity does not qualify for authorization under the NWP and instruct the applicant on the procedures to seek authorization under an individual permit; (b) that the activity is authorized under the NWP subject to the applicant's submission of a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal; or (c) that the activity is authorized under the NWP with specific modifications or conditions. Where the district engineer determines that mitigation is required to ensure no more than minimal adverse environmental effects, the activity will be authorized within the 45-day PCN period (unless additional time is required to comply with general conditions 18, 20, and/or 31), with activity-specific conditions that state the mitigation requirements. The authorization will include the necessary conceptual or detailed mitigation plan or a requirement that the applicant submit a mitigation plan that would reduce the adverse environmental effects so that they are no more than minimal. When compensatory mitigation is required, no work in waters of the United States may occur until the district engineer has approved a specific mitigation plan or has determined that prior approval of a final mitigation plan is not practicable or not necessary to ensure timely completion of the required compensatory mitigation.

E. Further Information

1. District Engineers have authority to determine if an activity complies with the terms and conditions of an NWP.
2. NWPs do not obviate the need to obtain other federal, state, or local permits, approvals, or authorizations required by law.
3. NWPs do not grant any property rights or exclusive privileges.
4. NWPs do not authorize any injury to the property or rights of others.

5. NWP's do not authorize interference with any existing or proposed Federal project (see general condition 31).

F. General Limitations and Conditions for all Ohio Environmental Protection Agency Clean Water Act Section 401 Certified Nationwide Permits

A. CULVERTS

For intermittent and perennial streams:

1. When practicable, bottomless or buried culverts are required when culvert size is greater than 36" in diameter. This condition does not apply if the culverts have a gradient of greater than 1% grade or installed on bedrock. A buried culvert means that the bottom 10% by dimension shall be buried below the existing stream bed elevation.
2. The culvert shall be designed and sized to accommodate bankfull discharge and match the existing depth of flow to facilitate the passage of aquatic organisms.
3. When practicable, culverts shall be installed at the existing streambed slope, to allow for the natural movement of bedload and aquatic organisms.

B. BEST MANAGEMENT PRACTICES

1. Unless subject to a more specific storm water National Pollutant Discharge Elimination System (NPDES) permit, all best management practices for storm water management shall be designed and implemented in accordance with the most current edition of the NPDES construction general permit available at: <http://www.epa.ohio.gov/dsw/storm/index.aspx>, or any watershed specific construction general permit.
2. Sediment and erosion control measures and best management practices must be designed, installed, and maintained in effective operating condition at all times during construction activities as required by applicable NPDES permits. Proper maintenance ensures corrective measures will be implemented for failed controls within 48 hours of discovery.
3. For perennial and intermittent streams, in-stream sediment control measures shall not be utilized, with the exception of turbidity curtains parallel to the stream bank, for the purpose of sediment collection. All sediment and erosion control measures shall be entirely removed and the natural grade of the site restored once construction is completed.

4. All avoided water resources and associated buffers/riparian areas shall be demarcated in the field and protected with suitable materials (e.g., silt fencing, snow fencing, signage, etc.) prior to site disturbance. These materials shall remain in place and be maintained throughout the construction process and shall be entirely removed once construction is completed.
5. Disturbance and removal of vegetation from the project construction area is to be avoided where possible and minimized to the maximum extent practicable. Entry to surface waters shall be through a single point of access to the maximum extent practicable to minimize disturbance to riparian habitat. Unavoidable temporary impacts to forested riparian habitat shall be restored as soon as practicable after in-water work is complete using tree and shrub species native to the specific ecoregion where the project is located.
6. All dredged material placed at an upland site shall be controlled so that sediment runoff to adjacent surface waters is minimized to the maximum extent practicable.
7. Straw bales shall not be used as a form of sediment control unless used in conjunction with another structural control such as silt fencing. Straw bales may be utilized for purposes of erosion control such as ditch checks.
8. Heavy equipment shall not be placed below the ordinary high water mark of any surface water, except when no other alternative is practicable.
9. Temporary fill for purposes of access or staging shall consist of suitable non-erodible material and shall be maintained to minimize erosion.
10. Chromated copper arsenate (CCA) and creosote treated lumber shall not be used in structures that come into contact with waters of the state.
11. All dewatering activities must be conducted in such a manner that does NOT result in a violation of water quality standards.
12. All areas of final grade must be protected from erosion within seven days.
13. All disturbed areas which remain dormant in excess of fourteen days must be protected from erosion within seven days from the last earth disturbing activity.
14. In the event of authorized in-stream activities, provisions must be established to redirect the stream flow around or through active

areas of construction in a stabilized, non-erosive manner to the maximum extent possible.

C. MITIGATION

1. Compensatory mitigation is required for the discharge of dredged or fill material into wetlands for permanent impacts exceeding 0.10 acres.
2. Compensatory mitigation is required for the discharge of dredged or fill material into streams for permanent impacts exceeding 0.03 acres.
3. When required, compensatory mitigation ratios for wetlands shall be provided in accordance with chapters 3745-1-54 of the Ohio Administrative Code.
4. When compensatory mitigation will be provided wholly or in part at a mitigation bank or through an in-lieu fee program, credit purchase shall only be authorized at those banks or in-lieu fee programs approved by the Interagency Review Team (IRT).

D. DIRECTOR'S AUTHORIZATION

1. In accordance with the procedures outlined in Appendix A, Ohio EPA can grant coverage under this certification for any project that does not meet one or more of the terms and conditions for eligibility of this certification or where the district engineer has been granted authority to waive certain requirements. Coverage can be granted when Ohio EPA determines, consistent with the special limitations and conditions for each certification, and after considering comments received on the requested director's authorization, that a project will have such a minimal impact on water quality that an individual 401 WQC is not necessary provided all other terms and conditions of this certification have been met. If a director's authorization is not granted, an individual 401 WQC must be obtained. In no case may a director's authorization issued under this certification exceed an impact threshold authorized by the Corps' Nationwide Permit.

E. NOTIFICATION TO OHIO EPA

1. For any activity proposed to be authorized under NWP 3, 4, 5, 6, 7, 13, 14, 15, 16, 18, 22, 23, 25, 27, 30, 32, 33, 34, 35, 36, 37, 38, 41, 45, 49, 53, and 54, **when a PCN is not required by the Corps**, notification to Ohio EPA is required for impacts to the following resources:
 - a. category 3 wetlands;

- b. ≥ 0.10 acres of wetland.
2. Notifications required by E.1 should be submitted using the Ohio EPA 401 Pre- application Request Form and contain all information required by Appendix B, as well as a description of the proposed impacts including project design details.
3. For any activity proposed to be authorized under NWP's 4, 6, 7, 13, 14, 15, 16, 18, 22, 23, 25, 30, 33, 34, 36, 37, 38, 41, 45, 53, and 54, **when a PCN is not required by the Corps**, notification to Ohio EPA is required for impacts to streams located in possibly eligible areas as depicted in the GIS NWP's Stream Eligibility Map.
4. Notifications required by E.3 should be submitted using the Ohio EPA 401 Pre- application Request Form and contain all information required by Appendix C, as well as a description of the proposed impacts including project design details.
5. When notification to Ohio EPA is required by conditions E.1 and E.3 above, the applicant shall not begin the activity until either:
 - a. They are notified in writing by Ohio EPA that the activity may proceed under the 401 WQC for the NWP; or
 - b. 45 calendar days have passed from Ohio EPA's receipt of the notification and the applicant has not received written notice from Ohio EPA that additional information is necessary or that an individual 401 WQC is required.

F. MISCELLANEOUS

1. Authorization under this certification does not relieve the certification holder from the responsibility of obtaining any other federal, state or local permits, approvals or authorizations.
2. For purposes of this certification the Corps' definition of single and complete linear and non-linear projects shall be applied to all conditions regarding impacts, mitigation, and director's authorizations. If a project includes impacts that are ineligible under this certification, an applicant must apply for an individual 401 WQC or a director's authorization for those impacts to resources that do not meet one or more of the terms and conditions within this certification.
3. For purposes of this certification temporary impact means temporary activities which facilitate the nature of the activity or aid in the access, staging, or development of construction that are short term in nature and which are expected, upon removal of the temporary

impact, to result in the surface water returning to conditions which support pre-impact biological function with minimal or no human intervention within 12 months following the completion of the temporary impact. Examples of temporary impacts include, but are not limited to access roads, work pads, staging areas, and stream crossings, including utility corridors. Activities that result in a wetland conversion (e.g. forested to non-forested) are not considered temporary impacts.

4. In the event that the issuance of a nationwide permit by the Corps requires individual 401 WQC for an activity that constitutes an emergency as defined in 33CFR 325.2(e)(4), the limitation and/or condition requiring the individual 401 WQC is not applicable and the project may proceed upon approval by the Corps provided all other terms of this certification, including mitigation, are met.
5. Representatives from Ohio EPA, Division of Surface Water will be allowed to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of this certification. This includes, but is not limited to, access to and copies of any records that must be kept under the conditions of this certification; and, authorization to sample and/or monitor any discharge activity or mitigation site. Ohio EPA will make a reasonable attempt to notify the applicant of its intention to inspect the site in advance of that inspection.
6. Impacts as referenced in this certification consist of waters of the United States, that are also waters of the state, directly impacted by the placement of fill or dredged material.
7. In accordance with the procedures outlined in Appendix B, and where specifically required in the special limitations and conditions of this certification, an applicant proposing to impact a wetland shall perform a wetland characterization analysis consistent with the Ohio Rapid Assessment Method (ORAM) to demonstrate wetland category for all projects requiring a PCN to the Corps or notification to Ohio EPA.
8. In accordance with the procedures outlined in Appendix C, and where specifically required in the special limitations and conditions of this certification, an applicant proposing to impact a stream shall determine the eligibility of the stream proposed for impact for all projects requiring a PCN to the Corps or notification to Ohio EPA.

Appendix A
Director's Authorization Process

1. To apply for a director's authorization for coverage under this certification, the applicant must provide to Ohio EPA the following:
 - a. A completed Director's Authorization Request Form available on the "Director's Authorization" tab located at:
<http://www.epa.ohio.gov/dsw/401/permitting.aspx>;
 - b. A copy of the pre-construction notification submitted to the Corps or a copy of the notification to Ohio EPA, if no PCN is required, including all attachments;
 - c. A copy of the provisional nationwide permit notification issued by the Corps including all attachments and special conditions, if any;
 - d. A copy of the mitigation plan as approved by the Corps, if applicable;
 - e. A detailed description of the conditions within this certification that are not being met;
 - f. A detailed description of any NWP terms and conditions, including impact limits that the Corps district engineer has waived for the project, if applicable;
 - g. A rationale of how the applicant believes the project will minimally impact water quality for those impacts to resources that do not meet one or more of the terms and conditions within this certification, including reason(s) why the resources are unable to be avoided;
 - h. Comments received from the Ohio Department of Natural Resources and United States Fish and Wildlife Service regarding threatened and endangered species or comments from an applicant that has been authorized by these entities to make threatened and endangered species determinations;
 - i. A one-time review fee of \$2000 for the project;

- j. A detailed description of how the project meets public need, as defined in [OAC 3745-1-50](#), for impacts to category 3 wetlands;
 - k. Documentation as required under Appendix B and C;
 - l. Any other documentation as may be required under this certification.
2. Upon receipt of the director's authorization request containing items a. through o. outlined above, excluding item c., the director will post the materials on the Ohio EPA, DSW webpage and invite public comment on the request for 15 days. The director will review and consider the comments received during the public comment period before making a decision on the director's authorization.



Appendix B ORAM Verification Process

The ORAM results shall be included with the pre-construction notification (PCN) or notification to Ohio EPA if a PCN is not required by the Corps.

For each wetland proposed for impact the applicant must provide the following information for review in accordance with the ORAM verification procedure:

- a. Complete ORAM forms prepared in accordance with the current ORAM manual;
- b. Wetland delineation prepared in accordance with the current method required by the Corps;
- c. A minimum of four high resolution color photographs taken while facing each of the four cardinal directions of each wetland proposed for impact. Photographs must accurately depict the quality of the wetland and may not include a majority of dying or dead vegetation or excessive cover due to seasonal conditions that vegetation and substrates cannot be observed, such as leaf litter, snow, or ice. Photographs deemed to be insufficient of representing the wetland will be required to be retaken once seasonal conditions are appropriate. Photographs shall be clearly labeled with the wetland name, direction, and date;
- d. USGS topographical map, National Wetlands Inventory map, Soil Survey map and aerial images (both historical and current) which clearly outline the entire wetland boundary; and
- e. Coordination letter from the Ohio Department of Natural Resources (ODNR), Natural Heritage Database indicating the presence or absence of state listed threatened or endangered species or comments from an applicant that has been authorized by ODNR to make threatened and endangered species determinations.
- f. A detailed description of how the project meets public need, as defined in OAC 3745-1-50, for impacts to category 3 wetlands;

Appendix C
Stream Eligibility Determination Process

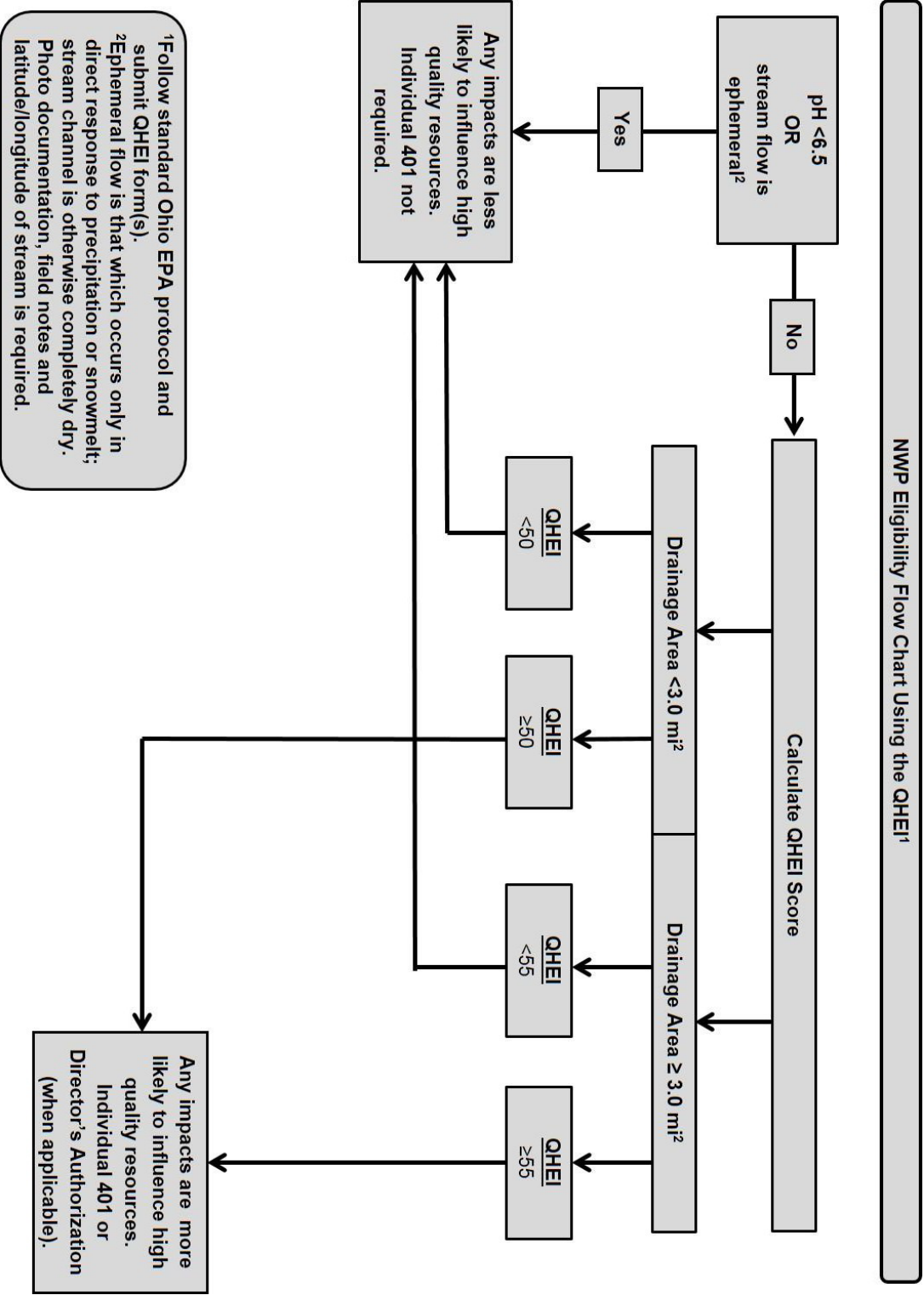
1. The stream eligibility results shall be included with the PCN or notification to Ohio EPA if a PCN is not required by the Corps. For each single and complete project with potential impacts to streams, where it is specifically required in the special limitations and conditions of this certification, the applicant shall determine if the streams proposed for impact are eligible for coverage under the 401 WQC for the Nationwide Permits using the following procedure:
 - a. Navigate to the Ohio EPA 401 website at: <http://www.epa.ohio.gov/dsw/401/permitting.aspx>
 - b. Click on the “Nationwide Permits” tab and then click on the “Stream Eligibility Web Map” link. To download the shapefile from the web map, click on the  in the upper right-hand corner of the webpage and select download. To draw project boundaries directly on the web map, click on the  in the upper left hand corner of the webpage.
 - i. If any stream proposed for impact within the project area falls within an ineligible area, impacts to that stream are not eligible for coverage under the 401 WQC for the Nationwide Permits, and the applicant shall apply for an individual 401 WQC or a director’s authorization.
 - ii. If any stream proposed for impact within the project area falls within a possibly eligible area, the applicant shall take pH values, when applicable, and perform a Qualitative Assessment Habitat Evaluation Index (QHEI) or Headwater Habitat Evaluation Index (HHEI) assessment for the stream. Using the flow charts provided below, the applicant shall determine if impacts to that stream are eligible for coverage under the 401 WQC for the Nationwide Permits or if an individual 401 WQC is required.
 - iii. If all streams proposed for impact within the project area are located within the eligible area, impacts to that stream are eligible for coverage under the 401 WQC for the Nationwide Permits and no further assessment is necessary.
 - d. The applicant shall submit the following information with the PCN or notification to Ohio EPA:

i. Color map(s), no smaller than 8"x10", which clearly shows the project boundary, streams proposed for impact, current aerial imagery, and the stream eligibility GIS layer.

ii. For each stream located in possibly eligible areas:

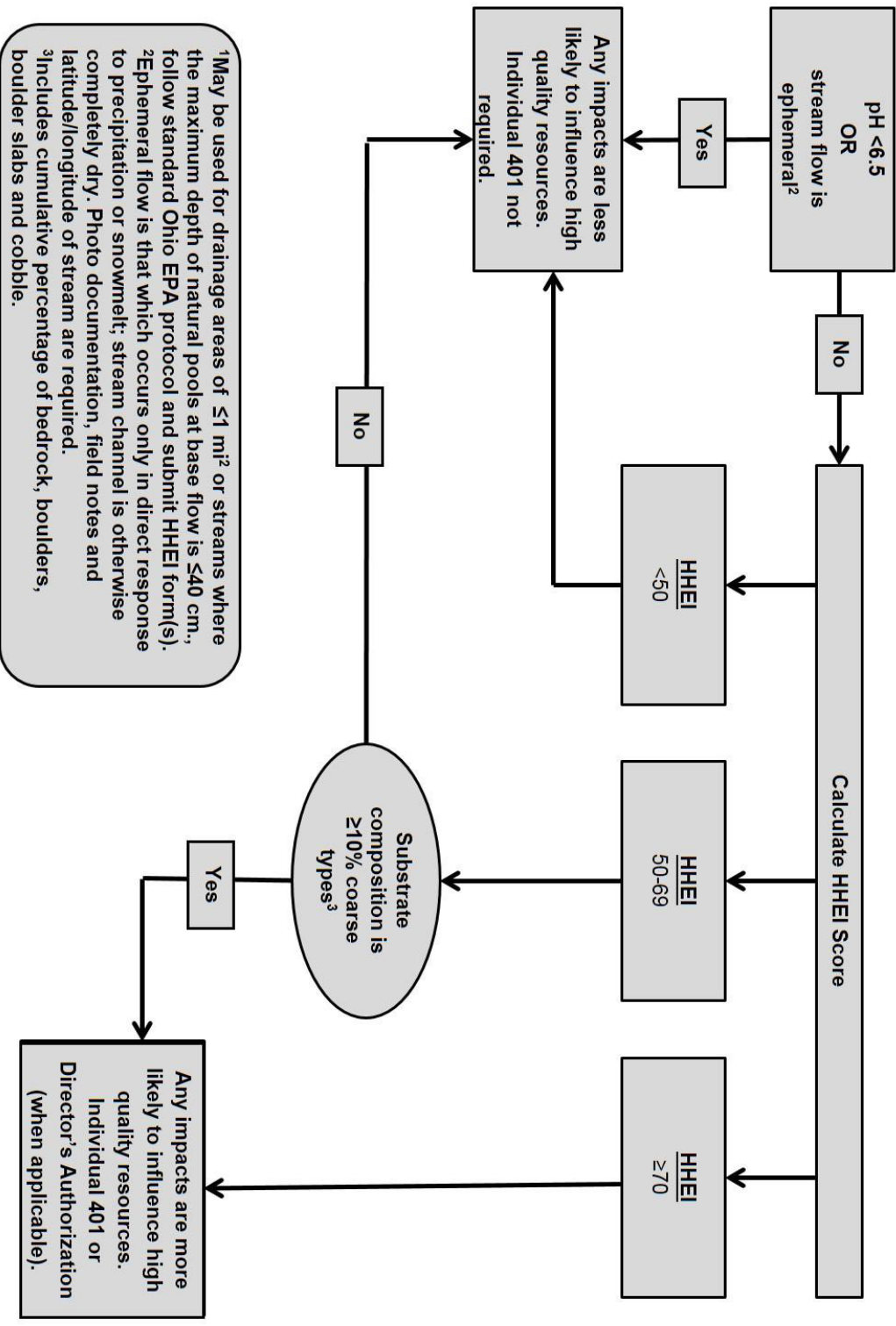
- (1) A minimum of three high resolution color photographs taken of the proposed impact area, including one facing upstream, one facing downstream, and a close up which clearly depicts the substrate composition and size for each stream proposed for impact. Photographs must accurately depict the quality of the stream and may not include excessive cover due to seasonal conditions that substrates cannot be observed such as snow or ice. Photographs deemed to be insufficient of representing the stream will be required to be retaken once seasonal conditions are appropriate. Photographs shall be clearly labeled with the stream name, direction, and date;
- (2) pH values for each stream proposed for impact taken within the proposed project area, where applicable;
- (3) Complete QHEI or HHEI sheets prepared in accordance with the current manuals; and
- (4) Statement of whether the streams proposed for impact within the project area are eligible for coverage under the 401 WQC for the Nationwide Permits or if an individual 401 WQC or a director's authorization is required.

401 WQC Stream Eligibility Flow Chart Using the QHEI



NWP Eligibility Flow Chart Using the HHEI¹

401 WQC Stream Eligibility Flow Chart Using the HHEI



¹May be used for drainage areas of ≤1 mi² or streams where the maximum depth of natural pools at base flow is ≤40 cm, follow standard Ohio EPA protocol and submit HHEI form(s).
²Ephemeral flow is that which occurs only in direct response to precipitation or snowmelt; stream channel is otherwise completely dry. Photo documentation, field notes and latitude/longitude of stream are required.
³Includes cumulative percentage of bedrock, boulders, boulder slabs and cobble.

G. Definitions

Best management practices (BMPs): Policies, practices, procedures, or structures implemented to mitigate the adverse environmental effects on surface water quality resulting from development. BMPs are categorized as structural or non-structural.

Compensatory mitigation: The restoration (re-establishment or rehabilitation), establishment (creation), enhancement, and/or in certain circumstances preservation of aquatic resources for the purposes of offsetting unavoidable adverse impacts which remain after all appropriate and practicable avoidance and minimization has been achieved.

Currently serviceable: Useable as is or with some maintenance, but not so degraded as to essentially require reconstruction.

Direct effects: Effects that are caused by the activity and occur at the same time and place.

Discharge: The term “discharge” means any discharge of dredged or fill material into waters of the United States.

Ecological reference: A model used to plan and design an aquatic habitat and riparian area restoration, enhancement, or establishment activity under NWP 27. An ecological reference may be based on the structure, functions, and dynamics of an aquatic habitat type or a riparian area type that currently exists in the region where the proposed NWP 27 activity is located. Alternatively, an ecological reference may be based on a conceptual model for the aquatic habitat type or riparian area type to be restored, enhanced, or established as a result of the proposed NWP 27 activity. An ecological reference takes into account the range of variation of the aquatic habitat type or riparian area type in the region.

Enhancement: The manipulation of the physical, chemical, or biological characteristics of an aquatic resource to heighten, intensify, or improve a specific aquatic resource function(s). Enhancement results in the gain of selected aquatic resource function(s), but may also lead to a decline in other aquatic resource function(s). Enhancement does not result in a gain in aquatic resource area.

Establishment (creation): The manipulation of the physical, chemical, or biological characteristics present to develop an aquatic resource that did not previously exist at an upland site. Establishment results in a gain in aquatic resource area.

High Tide Line: The line of intersection of the land with the water’s surface at the maximum height reached by a rising tide. The high tide line may be determined, in the absence of actual data, by a line of oil or scum along shore objects, a more or less continuous deposit of fine shell or debris on the foreshore or berm, other physical markings or characteristics, vegetation lines, tidal gages, or other suitable means that delineate the general height reached by a rising tide. The line encompasses spring high

tides and other high tides that occur with periodic frequency but does not include storm surges in which there is a departure from the normal or predicted reach of the tide due to the piling up of water against a coast by strong winds such as those accompanying a hurricane or other intense storm.

Historic Property: Any prehistoric or historic district, site (including archaeological site), building, structure, or other object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR part 60).

Independent utility: A test to determine what constitutes a single and complete non-linear project in the Corps Regulatory Program. A project is considered to have independent utility if it would be constructed absent the construction of other projects in the project area. Portions of a multi-phase project that depend upon other phases of the project do not have independent utility. Phases of a project that would be constructed even if the other phases were not built can be considered as separate single and complete projects with independent utility.

Indirect effects: Effects that are caused by the activity and are later in time or farther removed in distance, but are still reasonably foreseeable.

Loss of waters of the United States: Waters of the United States that are permanently adversely affected by filling, flooding, excavation, or drainage because of the regulated activity. The loss of stream bed includes the acres of stream bed that are permanently adversely affected by filling or excavation because of the regulated activity. Permanent adverse effects include permanent discharges of dredged or fill material that change an aquatic area to dry land, increase the bottom elevation of a waterbody, or change the use of a waterbody. The acreage of loss of waters of the United States is a threshold measurement of the impact to jurisdictional waters or wetlands for determining whether a project may qualify for an NWP; it is not a net threshold that is calculated after considering compensatory mitigation that may be used to offset losses of aquatic functions and services. Waters of the United States temporarily filled, flooded, excavated, or drained, but restored to pre-construction contours and elevations after construction, are not included in the measurement of loss of waters of the United States. Impacts resulting from activities that do not require Department of the Army authorization, such as activities eligible for exemptions under section 404(f) of the Clean Water Act, are not considered when calculating the loss of waters of the United States.

Navigable waters: Waters subject to section 10 of the Rivers and Harbors Act of 1899. These waters are defined at 33 CFR part 329.

Non-tidal wetland: A non-tidal wetland is a wetland that is not subject to the ebb and flow of tidal waters. Nontidal wetlands contiguous to tidal waters are located landward of the high tide line (i.e., spring high tide line).

Open water: For purposes of the NWRPs, an open water is any area that in a year with normal patterns of precipitation has water flowing or standing above ground to the extent that an ordinary high water mark can be determined. Aquatic vegetation within the area of flowing or standing water is either non-emergent, sparse, or absent. Vegetated shallows are considered to be open waters. Examples of “open waters” include rivers, streams, lakes, and ponds.

Ordinary High Water Mark: The term ordinary high water mark means that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Perennial stream: A perennial stream has surface water flowing continuously year-round during a typical year.

Practicable: Available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes.

Pre-construction notification: A request submitted by the project proponent to the Corps for confirmation that a particular activity is authorized by nationwide permit. The request may be a permit application, letter, or similar document that includes information about the proposed work and its anticipated environmental effects. Preconstruction notification may be required by the terms and conditions of a nationwide permit, or by regional conditions. A pre-construction notification may be voluntarily submitted in cases where preconstruction notification is not required and the project proponent wants confirmation that the activity is authorized by nationwide permit.

Preservation: The removal of a threat to, or preventing the decline of, aquatic resources by an action in or near those aquatic resources. This term includes activities commonly associated with the protection and maintenance of aquatic resources through the implementation of appropriate legal and physical mechanisms. Preservation does not result in a gain of aquatic resource area or functions.

Re-establishment: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former aquatic resource. Reestablishment results in rebuilding a former aquatic resource and results in a gain in aquatic resource area and functions.

Rehabilitation: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of repairing natural/historic functions to a degraded aquatic

resource. Rehabilitation results in a gain in aquatic resource function, but does not result in a gain in aquatic resource area.

Restoration: The manipulation of the physical, chemical, or biological characteristics of a site with the goal of returning natural/historic functions to a former or degraded aquatic resource. For the purpose of tracking net gains in aquatic resource area, restoration is divided into two categories: Reestablishment and rehabilitation.

Riffle and pool complex: Riffle and pool complexes are special aquatic sites under the 404(b)(1) Guidelines. Riffle and pool complexes sometimes characterize steep gradient sections of streams. Such stream sections are recognizable by their hydraulic characteristics. The rapid movement of water over a coarse substrate in riffles results in a rough flow, a turbulent surface, and high dissolved oxygen levels in the water. Pools are deeper areas associated with riffles. A slower stream velocity, a streaming flow, a smooth surface, and a finer substrate characterize pools.

Riparian areas: Riparian areas are lands next to streams, lakes, and estuarine-marine shorelines. Riparian areas are transitional between terrestrial and aquatic ecosystems, through which surface and subsurface hydrology connects riverine, lacustrine, estuarine, and marine waters with their adjacent wetlands, non-wetland waters, or uplands. Riparian areas provide a variety of ecological functions and services and help improve or maintain local water quality. (See general condition 23.)

Shellfish seeding: The placement of shellfish seed and/or suitable substrate to increase shellfish production. Shellfish seed consists of immature individual shellfish or individual shellfish attached to shells or shell fragments (i.e., spat on shell). Suitable substrate may consist of shellfish shells, shell fragments, or other appropriate materials placed into waters for shellfish habitat.

Single and complete linear project: A linear project is a project constructed for the purpose of getting people, goods, or services from a point of origin to a terminal point, which often involves multiple crossings of one or more waterbodies at separate and distant locations. The term “single and complete project” is defined as that portion of the total linear project proposed or accomplished by one owner/developer or partnership or other association of owners/developers that includes all crossings of a single water of the United States (i.e., a single waterbody) at a specific location. For linear projects crossing a single or multiple waterbodies several times at separate and distant locations, each crossing is considered a single and complete project for purposes of NWP authorization. However, individual channels in a braided stream or river, or individual arms of a large, irregularly shaped wetland or lake, etc., are not separate waterbodies, and crossings of such features cannot be considered separately.

Single and complete non-linear project: For non-linear projects, the term “single and complete project” is defined at 33 CFR 330.2(i) as the total project proposed or accomplished by one owner/developer or partnership or other association of owners/developers. A single and complete non-linear project must have independent

utility (see definition of “independent utility”). Single and complete non-linear projects may not be “piecemealed” to avoid the limits in an NWP authorization.

Stormwater management: Stormwater management is the mechanism for controlling stormwater runoff for the purposes of reducing downstream erosion, water quality degradation, and flooding and mitigating the adverse effects of changes in land use on the aquatic environment.

Stormwater management facilities: Stormwater management facilities are those facilities, including but not limited to, stormwater retention and detention ponds and best management practices, which retain water for a period of time to control runoff and/or improve the quality (i.e., by reducing the concentration of nutrients, sediments, hazardous substances and other pollutants) of stormwater runoff.

Stream bed: The substrate of the stream channel between the ordinary high water marks. The substrate may be bedrock or inorganic particles that range in size from clay to boulders. Wetlands contiguous to the stream bed, but outside of the ordinary high water marks, are not considered part of the stream bed.

Stream channelization: The manipulation of a stream’s course, condition, capacity, or location that causes more than minimal interruption of normal stream processes. A channelized jurisdictional stream remains a water of the United States.

Structure: An object that is arranged in a definite pattern of organization. Examples of structures include, without limitation, any pier, boat dock, boat ramp, wharf, dolphin, weir, boom, breakwater, bulkhead, revetment, riprap, jetty, artificial island, artificial reef, permanent mooring structure, power transmission line, permanently moored floating vessel, piling, aid to navigation, or any other manmade obstacle or obstruction.

Tidal wetland: A tidal wetland is a jurisdictional wetland that is inundated by tidal waters. Tidal waters rise and fall in a predictable and measurable rhythm or cycle due to the gravitational pulls of the moon and sun. Tidal waters end where the rise and fall of the water surface can no longer be practically measured in a predictable rhythm due to masking by other waters, wind, or other effects. Tidal wetlands are located channelward of the high tide line.

Tribal lands: Any lands title to which is either: (1) Held in trust by the United States for the benefit of any Indian tribe or individual; or (2) held by any Indian tribe or individual subject to restrictions by the United States against alienation.

Tribal rights: Those rights legally accruing to a tribe or tribes by virtue of inherent sovereign authority, unextinguished aboriginal title, treaty, statute, judicial decisions, executive order or agreement, and that give rise to legally enforceable remedies.

Vegetated shallows: Vegetated shallows are special aquatic sites under the 404(b)(1) Guidelines. They are areas that are permanently inundated and under normal

circumstances have rooted aquatic vegetation, such as seagrasses in marine and estuarine systems and a variety of vascular rooted plants in freshwater systems.

Waterbody: For purposes of the NHPs, a waterbody is a “water of the United States.” If a wetland is adjacent to a waterbody determined to be a water of the United States, that waterbody and any adjacent wetlands are considered together as a single aquatic unit (see 33 CFR 328.4(c)(2)).

**FINAL REPORT
STRUCTURE FOUNDATION EXPLORATION
SELBY BLVD. W. CULVERT OVER RUSH RUN
FRA-SELBY-00.198
FRANKLIN COUNTY, OHIO
PID#: 116037**

Prepared For:

American Structurepoint
2550 Corporate Exchange Drive, Suite 300
Columbus, OH 43231

Prepared by:

NATIONAL ENGINEERING AND ARCHITECTURAL SERVICES INC.
2800 Corporate Exchange Drive, Suite 240
Columbus, Ohio 43231

NEAS PROJECT 22-0050

April 2, 2024



EXECUTIVE SUMMARY

The City of Worthington has proposed a bridge replacement project FRA-SELBY-00.198 (PID 116037) in Franklin County, Ohio. The project involves the replacement of the bridge carrying W Selby Blvd over Rush Run approximately 650 feet west of North High Street. National Engineering & Architectural Services, Inc. (NEAS) has been contracted to perform geotechnical engineering services for the project. The purpose of the geotechnical engineering services was to perform geotechnical explorations within the project limits to obtain information concerning the subsurface soil and groundwater conditions relevant to the design and construction of the project. The scope of work performed by NEAS as part of the referenced project included: a review of published geotechnical information; performing 2 test borings for the proposed culverts; laboratory testing of soil samples in accordance with the SGE; performing geotechnical engineering analysis to assess culvert design and construction considerations; and development of this summary report.

NEAS understands that the proposed project consists of the replacement of the existing culvert carrying W Selby Blvd over Rush Run. The existing structure is twin precast reinforced concrete box culverts with 12 ft span and 8 ft rise. The proposed structure is a precast reinforced concrete three-sided flat top culvert with a 26' span x 7'-2" rise and a length of approximately 72 ft. The proposed culvert will be sitting on cast-in-place base slab. This report presents a summary of the encountered superficial and subsurface conditions and our recommendations for culvert foundation design and construction in accordance with Load and Resistance Factor Design (LRFD) method as set forth in AASHTO's Publication LRFD Bridge Design Specifications, 9th Edition (AASHTO LRFD, 2020) and ODOT's 2023 Bridge Design Manual (BDM) (ODOT BDM, 2023).

At the project site, the natural overburden soils consist of primarily cohesive materials down to around 765.1 to 766.6 ft amsl and included Sandy Silt (A-4a) and Silt and Clay (A-6a). Granular soils were encountered at the project site primarily below the cohesive soil layer includes Gravel and/or Stone fragments (A-1-a), Stone Fragments with Sand (A-1-b), Gravel and/or Stone Fragments with Sand, Silt, and Clay (A-2-6), and Coarse and Fine Sand (A-3a). Groundwater was encountered during drilling in both structure borings (B-001 and B-002) performed at 18 ft and 18.5 ft bgs (elevation 763.8 ft and 766.2 ft amsl), respectively. **An artesian aquifer with a flow rate that increased as drilling continued was encountered in both borings starting at the first encounter of groundwater (elevation 763.8 ft and 766.2 ft amsl).** The bottom of the aquifer could not be ascertained as it was below the end of both borings. Bedrock was not encountered in either of the structure borings performed.

For the proposed culvert, geotechnical analyses consisting of external stability (i.e., overall stability, bearing capacity) were performed. Based on our analyses, the CDRs calculated for the referenced cross sections with respect to bearing, sliding and overturning are all larger than 1.0, which indicates a safe design. The factored bearing resistances range from 2.1 ksf to 2.8 ksf at the inlet location and from 4.0 ksf to 4.8 ksf at the outlet location. Since the proposed culvert will be sitting on a cast-in-place base slab, based on our experience and engineering judgment, the global stability at both inlet and outlet locations should not be a concern.

TABLE OF CONTENTS

1. INTRODUCTION.....	4
1.1. GENERAL.....	4
1.2. PROPOSED CONSTRUCTION	4
2. GEOLOGY AND OBSERVATIONS OF THE PROJECT	4
2.1. GEOLOGY AND PHYSIOGRAPHY	4
2.2. HYDROLOGY/HYDROGEOLOGY	5
2.3. MINING AND OIL/GAS PRODUCTION.....	5
2.4. HISTORICAL RECORDS AND PREVIOUS PHASES OF PROJECT EXPLORATION.....	5
2.5. SITE RECONNAISSANCE	5
3. GEOTECHNICAL EXPLORATION.....	8
3.1. FIELD EXPLORATION PROGRAM.....	8
3.2. LABORATORY TESTING PROGRAM.....	8
3.2.1. <i>Classification Testing</i>	8
3.2.2. <i>Standard Penetration Test Results</i>	9
4. GEOTECHNICAL FINDINGS	9
4.1. SUBSURFACE CONDITIONS	9
4.1.1. <i>Overburden Soil</i>	9
5. ANALYSIS AND RECOMMENDATIONS.....	10
5.1. GENERALIZED SOIL PROFILE FOR ANALYSIS	10
5.2. CULVERT ANALYSIS	11
5.2.1. <i>Wingwall Design Assumptions</i>	11
5.2.2. <i>External Stability</i>	11
5.2.3. <i>Global Stability</i>	13
5.3. TEMPORARY EXCAVATIONS.....	13
6. QUALIFICATIONS	13

LIST OF TABLES

TABLE 1: PROJECT BORINGS SUMMARY8
TABLE 2: SOIL PROFILE AND ESTIMATED ENGINEERING PROPERTIES – B-001-0-22.....10
TABLE 3: SOIL PROFILE AND ESTIMATED ENGINEERING PROPERTIES – B-002-0-22.....11
TABLE 4: DESIGN SOIL PARAMETERS FOR FILL MATERIALS.....11
TABLE 5: LOAD AND RESISTANCE FACTORS FOR CULVERT WINGWALL ANALYSIS.....12
TABLE 6: EXTERNAL STABILITY ANALYSIS SUMMARY AT INLET LOCATION.....12
TABLE 7: EXTERNAL STABILITY ANALYSIS SUMMARY AT OUTLET LOCATION13

LIST OF APPENDICES

APPENDIX A: SITE PLAN
APPENDIX B: SOIL BORING LOGS
APPENDIX C: EXTERNAL STABILITY ANALYSES

1. INTRODUCTION

1.1. General

NEAS presents our Structure Foundation Exploration Report for the proposed culvert replacement FRA-SELBY-00.198 (PID: 116037) project in Franklin County, Ohio. The proposed project site is the bridge carrying W Selby Blvd over Rush Run about 650 ft west of North High St. in the City of Worthington, Ohio.

This report presents a summary of the encountered surficial and subsurface conditions and our recommendations for culvert foundation design and construction in accordance with Load and Resistance Factor Design (LRFD) method as set forth in AASHTO's Publication LRFD Bridge Design Specifications, 9th Edition (AASHTO LRFD, 2020) and ODOT's 2023 Bridge Design Manual (BDM) (ODOT BDM, 2023).

The exploration was conducted in general accordance with National Engineering & Architectural Services, Inc.'s (NEAS's) proposal to American Structurepoint, dated September 14, 2022, and with the provisions of ODOT's *Specifications for Geotechnical Explorations* (SGE) (ODOT, 2023).

The scope of work performed by NEAS as part of the referenced project included: a review of published geotechnical information; performing 2 test borings for the bridge; laboratory testing of soil samples in accordance with the SGE; performing geotechnical engineering soil analysis to assist in proposed bridge design and construction considerations; and development of this summary report.

1.2. Proposed Construction

NEAS understands that the proposed project consists of the replacement of the existing culvert carrying W Selby Blvd over Rush Run. The existing structure is twin precast reinforced concrete box culverts with 12 ft span and 8 ft rise. The proposed structure is a precast reinforced concrete three-sided flat top culvert with a 26' span x 7'-2" rise and a length of approximately 72 ft. The proposed culvert will be sitting on cast-in-place base slab.

2. GEOLOGY AND OBSERVATIONS OF THE PROJECT

2.1. Geology and Physiography

The project site is located within the Columbus Lowland Till Plains, a subdivision of the Southern Ohio Loamy Till Plain. This is a moderately low relief (25 ft) lowland surrounded in all directions by relative uplands, having a broad regional slope toward the Scioto Valley, containing many larger streams. Elevations of the region range from 600 to 850 ft above mean sea level (amsl) (950 ft amsl near Powell Moraine). The geology within this region is described as Wisconsinan-age till that is high lime in the west to medium-lime in the east. The geology is also described as containing extensive outwash in Scioto Valley overlying deep Devonian- to Mississippian-age carbonate rocks, shales, and siltstones (ODGS, 1998).

The geology at the project site is mapped as an average of 150 ft of Wisconsinan-age till underlain by Devonian-age Shale bedrock (ODGS, 2005). The till is described as an unsorted mix of clay, silt, sand,

Structure Foundation Exploration – FINAL
Culvert Replacement
FRA-SELBY-00.198
Franklin County, Ohio
PID: 116037

gravel, and boulders. May contain silt, sand, and gravel lenses. Till in deep buried valleys is noted as potentially being older than Wisconsinan.

Based on the Bedrock Geologic Units Map of Ohio (USGS & ODGS, 2006), bedrock within the project area consists of Shale of the Ohio Shale formation. This formation is comprised of Devonian-age Shale. The Shale in this formation is described as brownish black to greenish gray and weathers to brown in color, carbonaceous to clayey, laminated to thin bedded, fissile parting, and a petroliferous odor. The bedrock appears to follow the natural topography of the site which slopes gently upwards from west to east. (ODGS, 2003). Based on the ODNR bedrock topography map of Ohio, bedrock elevations at the project site can be expected to be between 780 to 800 ft amsl, putting bedrock at a depth of about 20 ft below ground surface (bgs) to rock outcroppings.

The soils at the project site have been mapped (Web Soil Survey) by the Natural Resources Conservation Service (USDA, 2015) as primarily Ross silt loam. Soils in the Ross series are characterized as very deep, well drained soils formed in loamy alluvium on flood plains and low terraces. The Ross series is comprised of both coarse- and fine-grained soils and classifies as A-4, A-6, and A-7 type soils according to the AASHTO method of soil classification.

2.2. Hydrology/Hydrogeology

Groundwater at the project site can be expected at an elevation consistent with that of the nearby Rush Run as it is the most dominant hydraulic influence in the vicinity of the project's boundaries. The water level of Rush Run may be generally representative of the local groundwater table. However, it should be noted that perched groundwater systems may be existent in areas due to the presence of fine-grained soils making it difficult for groundwater to permeate to the phreatic surface.

The project site is not located within a regulatory flood hazard area based on available mapping by the Federal Emergency Management Agency's (FEMA) National Flood Hazard mapping program (FEMA, 2019).

2.3. Mining and Oil/Gas Production

No mines were noted on ODNR's Abandoned Underground Mine Locator in the vicinity of the project site. (ODNR [1], 2016).

No oil or gas wells were noted on ODNR's Oil and Gas Well Locator in the vicinity of the project site (ODNR [1], 2020).

2.4. Historical Records and Previous Phases of Project Exploration

No reports/plans were available for review or evaluation from the ODOT Transportation Information Mapping System (TIMS), and as such, none are referenced or presented within this report.

2.5. Site Reconnaissance

A field reconnaissance visit for the culvert carrying Selby Blvd over Rush Run was conducted on December 15th, 2022 in the City of Worthington, Ohio. During our field reconnaissance, site conditions (including existing pavement conditions) were noted and photographed.

Land use at the project site can be described as a combination of woodland and residential.

Structure Foundation Exploration – FINAL
Culvert Replacement
FRA-SELBY-00.198
Franklin County, Ohio
PID: 116037

The existing culvert carrying W Selby Blvd. over Rush Run is a twin concrete box culvert which carries one lane of traffic in each direction on an earthen embankment above the culvert with an asphalt pavement roadway (Photograph 1). The existing embankment slopes appeared to be in good condition with few signs of instability. The existing embankment slopes appeared to be at grades ranging 2 Horizontal and 1 Vertical (2H:1V) to 1.5H:1V. The existing embankments were poorly protected with rocks. Overall, the culvert appeared to be in poor condition with structural wear observed on the underside of the box culvert, inlet/outlet of the culvert and wingwalls. Major spalling, cracking, and disintegration of concrete leading to exposed rebar was observed at both the inlet and outlet of the culvert. (Photograph 2).

The existing culvert appeared to be poorly drained with all the water going through the western box of the twin box culvert with none observed passing through the eastern box (Photograph 3). Overall, the pavement at the site was observed to be in good condition with almost no signs of wear (Photograph 4). The pavement appeared to be well drained with no signs of standing water.

Photograph 1: Pavement Condition of W Selby Blvd



Structure Foundation Exploration – FINAL
Culvert Replacement
FRA-SELBY-00.198
Franklin County, Ohio
PID: 116037

Photograph 2: Underside of the Culvert



Photograph 3: Twin Box Culvert



3. GEOTECHNICAL EXPLORATION

3.1. Field Exploration Program

The project subsurface exploration was conducted by NEAS between December 1, 2022, and December 5, 2022, and included 2 borings drilled to depths of between 26.5 ft and 28 ft bgs. The boring locations were selected by NEAS in general accordance with the guidelines contained in the SGE with the intent to evaluate subsurface soil and groundwater conditions. Borings were located within the planned roadway/structure construction areas that were not restricted by underground utilities or dictated by terrain (e.g. steep embankment slopes). Project boring locations were located and surveyed in the field by NEAS after drilling. Each individual project boring log (to be included within Appendix B) will include the recorded boring latitude and longitude location (based on the surveyed Ohio State Plane South, NAD83, location) and the corresponding ground surface elevation, as shown in Table 1.

Table 1: Project Borings Summary

Boring Number	Alignment	Latitude	Longitude	Elevation (NAVD 88) (ft)	Depth (ft)	Structure
B-001-0-22	Selby Blvd	40.077600	-83.021250	781.8	28.0	Culvert
B-002-0-22	Selby Blvd	40.077660	-83.021000	784.7	26.5	Culvert

Project borings were drilled using a CME 55T truck-mounted drilling rig utilizing 3.25-inch (inner diameter) hollow stem augers. Soil samples for roadway borings were recovered at 2.5 ft intervals to 13.5 ft bgs, then continuously drilled to between 20 and 22.5 ft, then at 5.0-ft intervals drilled to end of boring (EOB) using an 18-inch split spoon sampler (AASHTO T-206 “Standard Method for Penetration Test and Split Barrel Sampling of Soils.”). The soil samples obtained from the exploration program were visually observed in the field by the NEAS field representative and preserved for review by a Geologist and possible laboratory testing. Standard penetration tests (SPT) were conducted using a CME auto hammer that has been calibrated to be 63.4% efficient (indicated on the boring logs) on January 24, 2022.

Field boring logs were prepared by drilling personnel, and included lithological description, SPT results recorded as blows per 6-inch increment of penetration and estimated unconfined shear strength values on specimens exhibiting cohesion (using a hand-penetrometer). Groundwater level observations were recorded both during and after the completion of drilling. These groundwater level observations are included on the individual boring logs. After completing the borings, the boreholes were sealed or backfilled with auger cuttings, bentonite chips, bentonite pellets, or a combination of these materials.

3.2. Laboratory Testing Program

The laboratory testing program consisted of classification testing and moisture content determinations. Data from the laboratory-testing program were incorporated onto the boring logs (Appendix B). Soil samples are retained at the laboratory for 60 days following report submittal, after which time they will be discarded.

3.2.1. Classification Testing

Representative soil samples were selected for index properties (Atterberg Limits) and gradation testing for classification purposes on approximately 33% of the samples. At each boring location, samples were selected for testing with the intent of identification and classification of all significant soil units. Soils not selected for testing were compared to laboratory tested samples/strata and classified visually. Moisture

Structure Foundation Exploration – FINAL
Culvert Replacement
FRA-SELBY-00.198
Franklin County, Ohio
PID: 116037

content testing was conducted on all samples. The laboratory testing was performed in general accordance with applicable AASHTO specifications.

A final classification of the soil strata was made in accordance with AASHTO M-145 “Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes,” as modified by ODOT “Classification of Soils” once laboratory test results became available. The results of the soil classification are presented on the boring logs provided in Appendix B.

3.2.2. Standard Penetration Test Results

Standard Penetration Tests (SPT) and split-barrel (commonly known as split-spoon) sampling of soils were performed at varying intervals (i.e., continuously or at 2.5-ft or 5 intervals) in the project borings performed. To account for the high efficiency (automatic) hammers used during SPT sampling, field SPT N-values were converted based on the calibrated efficiency (energy ratio) of the specific drill rig's hammer. Field N-values were converted to an equivalent rod energy of 60% (N_{60}) for use in analysis or for correlation purposes. The resulting N_{60} values are presented on the boring logs provided in Appendix B.

4. GEOTECHNICAL FINDINGS

The subsurface conditions encountered during NEAS's explorations are described in the following subsections and on each boring log presented in Appendix B. The boring logs represent NEAS's interpretation of the subsurface conditions encountered at each boring location based on our site observations, field logs, visual review of the soil samples by NEAS's geologist, and laboratory test results. The lines designating the interfaces between various soil strata on the boring logs represent the approximate interface location; the actual transition between strata may be gradual and indistinct. The subsurface soil and groundwater characterizations included herein, including summary test data, are based on the subsurface findings from the geotechnical explorations performed by NEAS as part of the referenced project, and consideration of the geological history of the site.

4.1. Subsurface Conditions

4.1.1. Overburden Soil

At the project site, the natural overburden soils consist of primarily cohesive materials to the elevations between 765.1 and 766.6 ft amsl and included Sandy Silt (A-4a) and Silt and Clay (A-6a). The soils of this stratum can be described as having a very stiff to hard consistency based on unconfined compressive strengths (estimated by means of hand penetrometer) between approximately 2.25 and 4.50 ton per square foot (tsf) and N_{60} values between 4 and 17 blows per foot (bpf). Natural moisture contents of the fine-grained till soils ranged from 11 to 18 percent in moisture. Based on Atterberg Limits test performed on representative samples of the natural till soils, the liquid and plastic limits ranged from 27 to 32 percent and 16 to 19 percent, respectively.

Granular soils were encountered at the project site primarily below the cohesive soil layer includes Gravel and/or stone fragments (A-1-a), Stone Fragments with Sand (A-1-b), Gravel and/or Stone Fragments with Sand, Silt, and Clay (A-2-6), and Coarse and Fine Sand (A-3a). The non-cohesive soils are described as loose to very dense in compactness correlating to N_{60} values between 7 and more than 50 bpf. Natural moisture contents of the non-cohesive till soils ranged from 8 to 26 percent in moisture.

Bedrock was not encountered in either of the structure borings performed.

Structure Foundation Exploration – FINAL
Culvert Replacement
FRA-SELBY-00.198
Franklin County, Ohio
PID: 116037

Groundwater was encountered during drilling in both structure borings (B-001 and B-002) performed at 18 ft and 18.5 ft bgs (elevation 763.8 ft and 766.2 ft amsl), respectively. **An artesian aquifer with a flow rate that increased as drilling continued was encountered in both borings starting at the first encounter of groundwater (elevation 763.8 ft and 766.2 ft amsl).** The bottom of the aquifer could not be ascertained as it was below the terminated depths of both borings.

5. ANALYSIS AND RECOMMENDATIONS

The existing culvert underlying W Selby Blvd over Rush Run will be replaced by a precast reinforced concrete three-sided flat top culvert. The analyses performed are based on the information: 1) the soil characteristics gathered during the subsurface exploration (i.e., SPT results, laboratory test results, etc.) presented in Section 5.1 of this report; and 2) the developed generalized soil profile at the proposed culvert location and other design assumptions presented in subsequent sections of this report, geotechnical analyses consisting of the estimated engineering properties of the soil profile at the project site, external stability and global stability analyses, were performed for the proposed culvert.

5.1. Generalized Soil Profile for Analysis

For analysis purposes, each boring log was reviewed and the engineering properties for each soil strata were estimated based on their field (i.e., SPT N₆₀ Values, hand penetrometer values, etc.) and laboratory (i.e., Atterberg Limits, grain size, etc.) test results using correlations provided in published engineering manuals, research reports and guidance documents. Engineering soil properties were estimated for each individual classified layer per boring location. Soil layers with similar behavior (i.e., cohesive, or non-cohesive/granular) and characteristics (i.e., relative compactness/consistency, moisture content, etc.) were grouped into generalized soil units (i.e., Soil Types) and weighted average values of the estimated engineering soil properties were assigned to each Soil Type to develop a generalized soil profile for analysis. The summary of the generalized soil profile including designated Soil Types, elevations, average engineering soil properties per boring location are presented in Tables 2 and 3 below. **The N₆₀ values below the first encounter of the artesian aquifer may not be reliable because of the high-water pressure.** Soil properties below the groundwater cannot be estimated due to the artesian condition.

Table 2: Soil Profile and Estimated Engineering Properties – B-001-0-22

Outlet : Soil Profile, B-001-0-22							
Soil Description	Unit Weight ⁽¹⁾ (pcf)	Moist Unit Weight ⁽¹⁾ (pcf)	Saturated Unit Weight ⁽¹⁾ (pcf)	Undrained Shear Strength ⁽²⁾ (psf)	Effective Cohesion ⁽³⁾ (psf)	Effective Friction Angle ⁽³⁾ (degrees)	Setup Factor (<i>f_{su}</i>)
Silt and Clay Depth (781.8 ft - 778.8 ft)	112	112	122	2100	200	24	1.50
Gravel with Sand, Silt and Clay Depth (778.8 ft - 776.3 ft)	110	110	120	-	-	32	1.20
Silt and Clay Depth (776.3 ft - 765.1 ft)	115	105	115	650	75	21	1.50
Gravel Depth (765.1 ft - 753.8 ft)	130	120	130	-	-	40	1.00
<small>Notes: 1. Values interpreted from Geotechnical Bulletin 7 Table 1. 2. Values calculated from Terzaghi and Peck (1967) if N₆₀ < 52, else Stroud and Butler (1975) was used. 3. Values interpreted from Geotechnical Bulletin 7 Table 2 for cohesive soils and LRFD BDS Table 10.4.6.2.4-1 and ODOT GDM Table 400-3 for granular soils.</small>							

Structure Foundation Exploration – FINAL
Culvert Replacement
FRA-SELBY-00.198
Franklin County, Ohio
PID: 116037

Table 3: Soil Profile and Estimated Engineering Properties – B-002-0-22

Inlet : Soil Profile, B-002-0-22							
Soil Description	Unit Weight ⁽¹⁾ (pcf)	Moist Unit Weight ⁽¹⁾ (pcf)	Saturated Unit Weight ⁽¹⁾ (pcf)	Undrained Shear Strength ⁽²⁾ (psf)	Effective Cohesion ⁽³⁾ (psf)	Effective Friction Angle ⁽³⁾ (degrees)	Setup Factor (f_{su})
Silt and Clay Depth (784.7 ft - 779.2 ft)	110	110	120	1600	150	23	1.50
Silt and Clay Depth (779.2 ft - 774.2 ft)	102	102	112	550	50	20	1.50
Silt and Clay Depth (774.2 ft - 766.6 ft)	110	110	120	1300	150	23	1.50
Gravel with Sand Depth (766.6 ft - 765.2 ft)	132	122	132	-	-	40	1.00
Coarse and Fine Sand Depth (765.2 ft - 763.7 ft)	130	120	130	-	-	38	1.00
Gravel Depth (763.7 ft - 760.9 ft)	130	120	130	-	-	40	1.00
Coarse and Fine Sand Depth (760.9 ft - 758.2 ft)	132	122	132	-	-	39	1.00

Notes:
1. Values interpreted from Geotechnical Bulletin 7 Table 1.
2. Values calculated from Terzaghi and Peck (1967) if $N_{100} < 52$, else Stroud and Butler (1975) was used.
3. Values interpreted from Geotechnical Bulletin 7 Table 2 for cohesive soils and LRFD BDS Table 10.4.6.2.4-1 and ODOT GDM Table 400-3 for granular soils.

5.2. Culvert Analysis

A foundation review was completed for the proposed Selby Blvd Culvert at both inlet and outlet locations.

5.2.1. Wingwall Design Assumptions

For the design of the proposed culvert substructure, ODOT's BDM, AASHTO's LRFD BDS, and the project conditions dictate analysis parameters and design minimums/constraints are to be used in the analysis and design process. The referenced parameters and design minimums/constraints that were significant to our analyses consist of the following:

- Porous backfill is to be placed from back of the wall extending from top of footing elevation to top of earth backfill with a width not less than 2 feet.
- Retained soils behind the porous backfill are to consist of material placed and compacted in accordance with Item 203, Roadway Excavation and Embankment, of the ODOT Construction and Material Specifications (CMS).
- Retained fill soils will meet the minimum design soil parameters per ODOT's BDM Table 307-1 as shown in Table 4 below.

Table 4: Design Soil Parameters for Fill Materials

Type of Soil	Soil Unit Weight (pcf)	Friction Angle (°)	Cohesion (psf)
Granular Material Type B, per 703.16.C	120	30	0

5.2.2. External Stability

Based on our estimated engineering soil properties, the wingwall design assumptions provided in Section 5.1.1 of this report, and the site plan provided by American Structurepoint on April 13, 2023, through email, external stability analyses of the proposed inlet and outlet wingwalls for the Selby Blvd Culvert was performed. The bottom of the slab footing is at the elevation of 770.50 ft amsl at both inlet and outlet locations. One critical cross section at the bending point of wingwall which has smallest width of footing and tallest design height was evaluated at each inlet and outlet location.

Structure Foundation Exploration – FINAL
Culvert Replacement
FRA-SELBY-00.198
Franklin County, Ohio
PID: 116037

LRFD Parameters

The wingwall cross sections were evaluated resistance to bearing pressure, sliding force and overturning at the Strength Limit State in accordance with Section 11.5.3 of the AASHTO's LRFD BDS. These design issues have been evaluated using a MathCAD-based software solution that follows the AASHTO BDS, as described in Appendix C. Load and resistance factors applicable to the design of a wingwall are presented below in Table 5 based on AASHTO LRFD Sections 11.5.6, 11.5.7 and 10.5.5.2.2.

Table 5: Load and Resistance Factors for Culvert Wingwall Analysis

Load Factors						
Group	Condition	Earth-Vertical	Earth-Horizontal	Dead load of structural components	Live Load Surcharge	Reference
		EV	EH	DC	LL	
Strength Ia	Sliding and Eccentricity	1.00	1.50	0.90	1.75	11.5.6
Strength Ib	Bearing Capacity	1.35	1.50	1.25	1.75	11.5.6
Resistance Factors						
Bearing resistance					0.55	11.5.7-1
Sliding resistance of permanent wall					1.00	11.5.7-1
Sliding resistance of passive earth pressure					0.50	10.5.5.2.2-1

Results are expressed in terms of Capacity to Demand Ratios (CDR) that compare the available factored resistances to the factored load. CDRs ≥ 1 indicate a safe design. The CDRs calculated for the referenced cross sections with respect to bearing, sliding and overturning, as well as the calculated factored bearing resistances are presented in Tables 6 and 7 below (External Stability Results can be found in Appendix C).

Table 6: External Stability Analysis Summary at Inlet Location

Selby Blvd Culvert - Inlet	
Location	Wingwall
Top of Wall (feet)	783.4
Top of Footing (feet)	773.0
Bottom of Footing (feet)	770.5
Design Wall Height (feet)	10.4
Total Wall Height (feet)	12.9
Boring Log Used in Calculation	B-002-0-22
Capacity Demand Ratio (CDR)	
Sliding (Undrained/Drained)	2.50 / 1.87
Overturning / Eccentricity	1.01
Bearing Capacity (Undrained/Drained)	1.46 / 1.69
Factored Bearing Resistance (ksf) ⁽¹⁾ (Undrained/Drained)	4.0 / 4.6
Notes:	
1. Bearing Resistance calculated in accordance to Section 11.10.5.4 of 2020 LRFD BDS and factored using Resistance Factor provided in Table 11.5.7-1 of 2020 LRFD BDS.	

Structure Foundation Exploration – FINAL
Culvert Replacement
FRA-SELBY-00.198
Franklin County, Ohio
PID: 116037

Table 7: External Stability Analysis Summary at Outlet Location

Selby Blvd Culvert - Outlet	
Location	Wingwall
Top of Wall (feet)	782.4
Top of Footing (feet)	773.0
Bottom of Footing (feet)	770.5
Design Wall Height (feet)	9.4
Total Wall Height (feet)	11.9
Boring Log Used in Calculation	B-001-0-22
Capacity Demand Ratio (CDR)	
Sliding (Undrained/Drained)	1.65 / 1.49
Overturning / Eccentricity	1.43
Bearing Capacity (Undrained/Drained)	1.08 / 1.44
Factored Bearing Resistance (ksf)⁽¹⁾ (Undrained/Drained)	2.1 / 2.8
<i>Notes:</i>	
1. Bearing Resistance calculated in accordance to Section 11.10.5.4 of 2020 LRFD BDS and factored using Resistance Factor provided in Table 11.5.7-1 of 2020 LRFD BDS.	

5.2.3. *Global Stability*

Since the proposed culvert will be sitting on a cast-in-place base slab, based on our experience and engineering judgment, the global stability at both inlet and outlet locations should not be a concern.

5.3. Temporary Excavations

It is recommended that all temporary excavations comply with the most recent Occupational Safety and Health Administration (OSHA) Excavating and Trenching Standard, Title 29 of the Code of Federal Regulation (CFR) Part 1926, Subpart P. The contractor is responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom. Per Title 29 CFR Part 1926, the contractor's competent person should evaluate the soil exposed in the excavations as part of their safety procedures. In no case should slope height, slope inclination, or excavation depth, including utility trench excavation depth, exceed those specified in local, state, and federal safety regulations. Based on the natural soils encountered at the site (Type C Soil), it is recommended that temporary excavation slopes (exceeding a depth of 3 ft and less than 20 ft) be laid back to at least 1.5H:1V and these slopes should be braced or backfilled if the excavation slope will be maintained for more than a day.

Sheeting cannot be installed for the phase construction due to the artesian condition encountered at the site.

6. QUALIFICATIONS

This investigation was performed in accordance with accepted geotechnical engineering practice for the purpose of characterizing the subsurface conditions at the site of bridge for the FRA-SELBY-00.198 project. This report has been prepared for American Structurepoint, The City of Worthington, and their design consultants to be used solely in evaluating the soils underlying the bridge site and presenting geotechnical engineering recommendations specific to this project. The assessment of general site environmental conditions or the presence of pollutants in the soil, rock and groundwater of the site was beyond the scope of this geotechnical exploration. Our recommendations are based on the results of our field explorations, laboratory test results from representative soil samples, and geotechnical engineering

Structure Foundation Exploration – FINAL
Culvert Replacement
FRA-SELBY-00.198
Franklin County, Ohio
PID: 116037

analyses. The results of the field explorations and laboratory tests, which form the basis of our recommendations, are presented in the appendices as noted. This report does not reflect any variations that may occur between the borings or elsewhere on the site, or variations whose nature and extent may not become evident until a later stage of construction. In the event that any changes in the nature, design or location of the proposed bridge are made, the conclusions and recommendations contained in this report should not be considered valid until they are reviewed and have been modified or verified in writing by a geotechnical engineer.

It has been a pleasure to be of service to American Structurepoint in performing this geotechnical exploration for the FRA-SELBY-00.198 project. Please call if there are any questions, or if we can be of further service.

Respectfully Submitted,



A handwritten signature in black ink that reads "Chunmei He".

Erich Beyer, E.I.
Staff Engineer

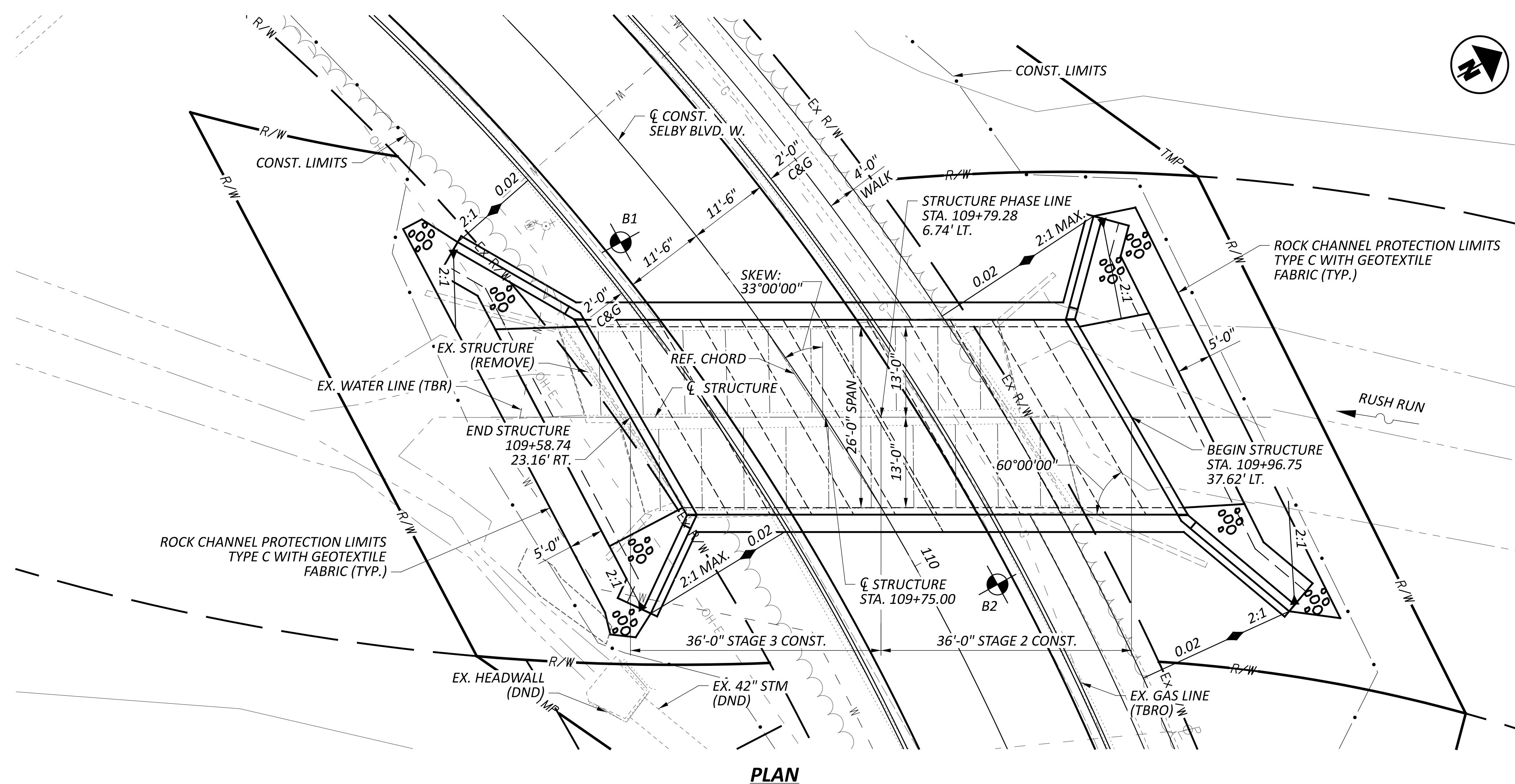
Chunmei He, Ph.D., P.E.
Geotechnical Engineer

REFERENCES

- FEMA. (2019, February). *FEMA Flood Map Service Center*. Retrieved from FEMA: <https://msc.fema.gov/portal/search?AddressQuery=oh-113%20and%20baumhart%20rd#searchresultsanchor>
- ODGS. (1998). Physiographic regions of Ohio: Ohio Department of Natural Resources, Division of Geological Survey. page-size map with text, 2p., scale 1:2,100,00.
- ODGS. (2003). Bedrock-topography data for Ohio: Ohio Department of Natural Resources, Division of Geological Survey Map BG-3, 1 CD-ROM, GIS file formats. Revised January 9, 2004.
- ODNR [1]. (2016). Ohio Abandoned Mine Locator Interactive Map. *Mines of Ohio*. Ohio Department of Natural Resources, Division of Geological Survey & Division of Mineral Resources. Retrieved from <https://gis.ohiodnr.gov/MapView/?config=OhioMines>
- ODNR [1]. (2019, February). *Ohio Abandoned Mine Locator Interactive Map*. Retrieved from ODNR Mines of Ohio Viewer: <https://gis.ohiodnr.gov/MapView/?config=OhioMines>
- ODNR [2]. (2016). Ohio Oil & Gas Locator Interactive Map. *Ohio Oil & Gas Wells*. Ohio Department of Natural Resources, Division of Oil and Gas. Retrieved from <https://gis.ohiodnr.gov/MapView/?config=oilgaswells>
- ODNR [2]. (2019, February). *Ohio Oil & Gas Locator Interactive Map*. Retrieved from ODNR Oil & Gas Well Viewer: <https://gis.ohiodnr.gov/MapView/?config=OilGasWells>
- ODNR. (2006). *Bedrock Geologic Map of Ohio*. Retrieved from Ohio Department of Natural Resources: http://geosurvey.ohiodnr.gov/portals/geosurvey/PDFs/BedrockGeology/BG-1_8.5x11.pdf
- ODOT. (2016). *Location and Design Manual - Volume Two Drainage Design*. Columbus, OH: Ohio Department of Transportation: Office of Hydraulic Engineering. Retrieved from [https://www.dot.state.oh.us/Divisions/Engineering/Hydraulics/Location and Design Volume 2/LD Volume 2 Archive 12013/ODOT-Location and Design Manual Volume II.pdf](https://www.dot.state.oh.us/Divisions/Engineering/Hydraulics/Location%20and%20Design%20Volume%202/LD%20Volume%202%20Archive%2012013/ODOT-Location%20and%20Design%20Manual%20Volume%20II.pdf)
- ODOT. (2022). *Specifications for Geotechnical Explorations*. Ohio Department of Transportation: Office of Geotechnical Engineering.
- Pavey, R. R., Goldthwait, R. P., Brockman, C. S., Hull, D. N., Swinford, E. M., & Van Horn, R. G. (1999). Quarternary geology of Ohio: Ohio Department of Natural Resources, Division of Geological Survey Map M-2. 1:500,000-scale map and 1:250,000-scale GIS files.
- USDA. (2015, September). Web Soil Survey. Retrieved from <http://websoilsurvey.nrcs.usda.gov>
- USGS & ODGS. (2005, June). Geologic Units of Ohio. *ohgeol.kmz*. United States Geologic Survey.

APPENDIX A

SITE PLAN



FOR BENCHMARK INFORMATION, SEE ROADWAY PLAN SHEET 2 / 31.

NOTES

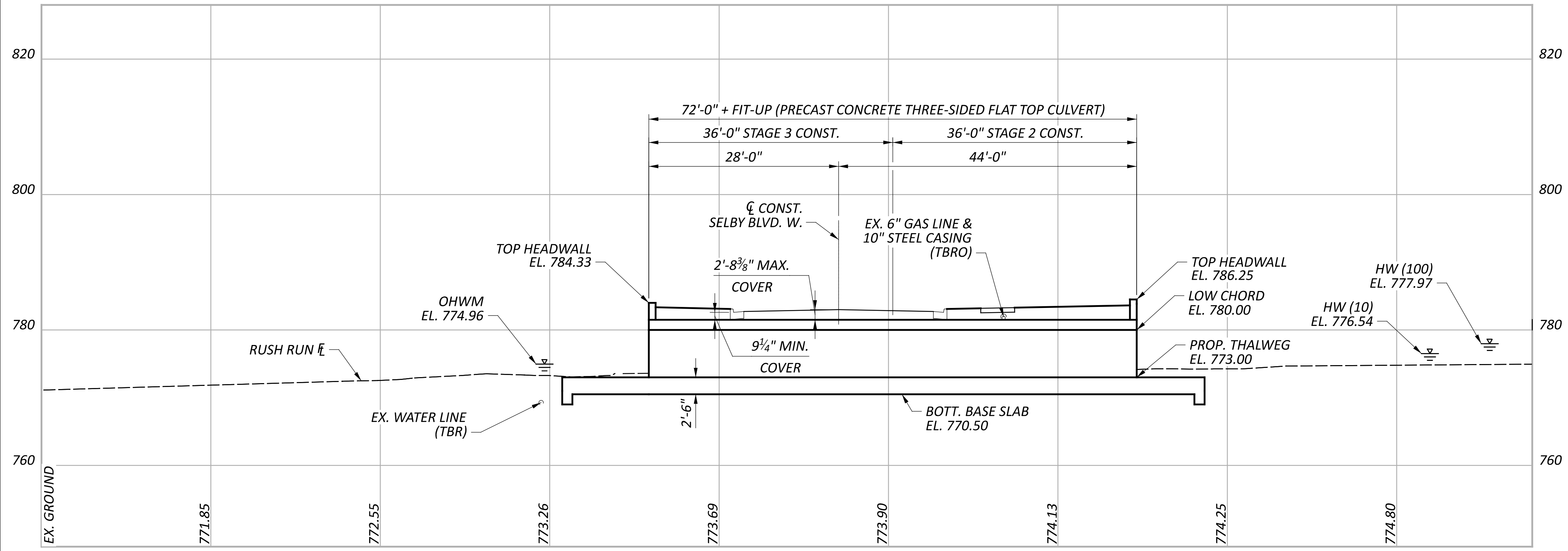
EARTHWORK LIMITS SHOWN ARE APPROXIMATE. ACTUAL SLOPES SHALL CONFORM TO PLAN CROSS SECTIONS.

LEGEND:

- ◆ BORING LOCATION
- DND - DO NOT DISTURB
- TBRO - TO BE RELOCATED BY OTHERS
- TBR - TO BE RELOCATED

HYDRAULIC DATA:

DRAINAGE AREA = 2.42 SQ. MILES
 Q (10) = 411 CFS V (10) = 4.55 FT/S
 Q (100) = 790 CFS V (100) = 5.03 FT/S
 STRUCTURE CLEARS THE 10 YEAR DESIGN HW BY 3.46'



EXISTING STRUCTURE	
TYPE: TWIN PRECAST REINFORCED CONCRETE BOX CULVERTS	
SPANS: 12'-0" SPAN X 8'-0" RISE	
ROADWAY: 27'-0"± FACE/FACE CURB	
LOADING: ASTM C850, INTERSTATE, < 2' COVER	
SKEW: 32°30'00"± LEFT FORWARD TO THE REFERENCE LINE	
WEARING SURFACE: BITUMINOUS	
APPROACH SLABS: NONE	
ALIGNMENT: TANGENT (ON REFERENCE LINE)	
CROWN: 0.016±	
STRUCTURE FILE NUMBER: 2561100	
DATE BUILT: 1982	
DISPOSITION: TO BE REMOVED	

PROPOSED STRUCTURE	
TYPE: PRECAST REINFORCED CONCRETE THREE-SIDED FLAT TOP CULVERT	
SPANS: 26'-0" SPAN X 7'-2" RISE	
ROADWAY: 27'-0" F/F CURB	
LOADING: HL-93	
SKEW: 33°00'00" TO REFERENCE CHORD	
FUTURE WEARING SURFACE: 0.060 KSF	
APPROACH SLABS: NONE	
ALIGNMENT: TANGENT (ON REFERENCE CHORD)	
COORDINATES: LATITUDE N 40°04'39.52"	
LONGITUDE W 83°01'16.05"	

CULVERT PLAN & PROFILE
FRA-SELBY-00.198
SELBY BLVD. W. OVER RUSH RUN

SFN	2561101
DESIGN AGENCY	STRUCTUREPOINT INC.
DESIGNER	CHECKER
ABD	SJF
REVIEWER	
JCS	04/07/23
PROJECT ID	116037
SUBSET	TOTAL
1	7
SHEET	TOTAL
23	31

APPENDIX B
BORING LOGS

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 12/20/22 12:37 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\FRA-SELBY RD BRIDGE\GINT FILES\FRA-SELBY RD BRIDGE.GP

PROJECT: <u>FRA-SELBY RD BRIDGE</u>	DRILLING FIRM / OPERATOR: <u>NEAS / JL</u>	DRILL RIG: <u>CME 55T</u>	STATION / OFFSET: _____	EXPLORATION ID <u>B-001-0-22</u>
TYPE: <u>BRIDGE</u>	SAMPLING FIRM / LOGGER: <u>NEAS / JL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>116037</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>1/24/22</u>	ELEVATION: <u>781.8 (MSL)</u> EOB: <u>28.0 ft.</u>	
START: <u>12/1/22</u> END: <u>12/2/22</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>63.4</u>	LAT / LONG: <u>40.077600, -83.021250</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTH	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
7.0" ASPHALT AND 11.0" BASE (DRILLERS DESCRIPTION)	781.8																	
HARD, BROWN, SILT AND CLAY, SOME SAND, LITTLE GRAVEL, DAMP	780.3	1	6	17	22	SS-1	4.50	13	11	16	33	27	30	17	13	15	A-6a (6)	
LOOSE, BROWN AND GRAY, GRAVEL AND STONE FRAGMENTS WITH SAND, SILT, AND CLAY, DAMP	778.8	2	10															
	776.3	3																
		4	5	7	22	SS-2	-	44	10	11	20	15	28	17	11	11	A-2-6 (0)	
		5	3	4														
VERY STIFF, GRAY, SILT AND CLAY, LITTLE TO SOME SAND, TRACE TO LITTLE GRAVEL AND STONE FRAGMENTS, DAMP	776.3	6	2	6	22	SS-3	2.25	15	13	14	33	25	27	16	11	13	A-6a (5)	
		7	3	3														
		8																
		9	1	4	50	SS-4	2.50	-	-	-	-	-	-	-	-	13	A-6a (V)	
		10	3															
		11																
		12	2	7	50	SS-5	2.50	-	-	-	-	-	-	-	-	15	A-6a (V)	
		13	3	4														
		14	1	5	17	SS-6	3.50	-	-	-	-	-	-	-	-	14	A-6a (V)	
		15	2	3														
		16	0	4	22	SS-7	2.50	-	-	-	-	-	-	-	-	14	A-6a (V)	
		17	1	2														
MEDIUM DENSE TO VERY DENSE, GRAY, GRAVEL AND STONE FRAGMENTS, SOME SAND, TRACE SILT, TRACE CLAY, MOIST TO WET	765.1	17	1	16	33	SS-8	-	52	22	11	9	6	NP	NP	NP	12	A-1-a (0)	
@18.0': ENCOUNTERED ARTESIAN AQUIFER. ARTESIAN FLOW RATE INCREASED WITH DEPTH.		18	6	9														
		19	4		12	SS-9	-	-	-	-	-	-	-	-	-	26	A-1-a (V)	
		20	21															
		21	50/5"		100	SS-10	-	-	-	-	-	-	-	-	-	11	A-1-a (V)	
		22	8	30	44	SS-11	-	-	-	-	-	-	-	-	-	8	A-1-a (V)	
		23	18	10														
		24																
		25	10	31	56	SS-12	-	-	-	-	-	-	-	-	-	16	A-1-a (V)	
		26	14	15														
		27																
	753.8	28																

AUGERED THROUGH EXISTING BOREHOLE TO 25.0' ON 12/2/22 AND ENCOUNTERED A NOTABLY HIGHER ARTESIAN FLOW RATE THAN ON 12/1/22.

NOTES: ARTESIAN GROUNDWATER ENCOUNTERED AT 18.0'.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 2 BAGS BENTONITE POWDER; POURED 6 BAGS HOLE PLUG

STANDARD ODOT SOIL BORING LOG (8.5 X 11) - OH DOT.GDT - 12/20/22 12:37 - X:\ACTIVE PROJECTS\ACTIVE SOIL PROJECTS\FRA-SELBY RD BRIDGE\GINT FILES\FRA-SELBY RD BRIDGE.GP

PROJECT: <u>FRA-SELBY RD BRIDGE</u>	DRILLING FIRM / OPERATOR: <u>NEAS / JL</u>	DRILL RIG: <u>CME 55T</u>	STATION / OFFSET: _____	EXPLORATION ID <u>B-002-0-22</u>
TYPE: <u>BRIDGE</u>	SAMPLING FIRM / LOGGER: <u>NEAS / JL</u>	HAMMER: <u>CME AUTOMATIC</u>	ALIGNMENT: _____	PAGE 1 OF 1
PID: <u>116037</u> SFN: _____	DRILLING METHOD: <u>3.25" HSA</u>	CALIBRATION DATE: <u>1/24/22</u>	ELEVATION: <u>784.7 (MSL)</u> EOB: <u>26.5 ft.</u>	
START: <u>12/5/22</u> END: <u>12/5/22</u>	SAMPLING METHOD: <u>SPT</u>	ENERGY RATIO (%): <u>63.4</u>	LAT / LONG: <u>40.077660, -83.021000</u>	

MATERIAL DESCRIPTION AND NOTES	ELEV.	DEPTHS	SPT/ RQD	N ₆₀	REC (%)	SAMPLE ID	HP (tsf)	GRADATION (%)					ATTERBERG				ODOT CLASS (GI)	HOLE SEALED
								GR	CS	FS	SI	CL	LL	PL	PI	WC		
6.0" ASPHALT AND 12.0" BASE (DRILLERS DESCRIPTION)	784.7																	
HARD, BROWN, SILT AND CLAY , SOME SAND, TRACE GRAVEL, DAMP	783.2	1	3															
STIFF, BROWN AND GRAY, SILT AND CLAY , "AND" GRAVEL AND STONE FRAGMENTS, SOME SAND, CONTAINS NO INTACT SOIL FOR HP READINGS, DAMP	781.7	2	4	11	33	SS-1	4.25	10	12	18	34	26	32	19	13	18	A-6a (6)	
VERY STIFF TO HARD, GRAY, SILT AND CLAY , LITTLE TO SOME SAND, TRACE TO LITTLE GRAVEL, DAMP	779.2	3																
		4	9	15	22	SS-2	-	40	13	11	21	15	32	18	14	11	A-6a (1)	
		5	10	4														
		6	1	5	22	SS-3	3.75	13	14	15	34	24	27	16	11	13	A-6a (5)	
		7	1	4														
		8																
		9	1	4	39	SS-4	4.00	-	-	-	-	-	-	-	-	14	A-6a (V)	
		10	2	2														
		11	2	4	11	44	SS-5	4.25	-	-	-	-	-	-	-	13	A-6a (V)	
		12	4	6														
		13																
		14	3	4	10	89	SS-6	4.50	-	-	-	-	-	-	-	13	A-6a (V)	
		15	4	5														
		16	4	4	11	100	SS-7	4.50	-	-	-	-	-	-	-	14	A-6a (V)	
		17	3	4	11	67	SS-8	4.50	9	15	14	32	30	30	18	12	14	A-6a (6)
	766.6	18	4	6														
DENSE, GRAY, GRAVEL AND STONE FRAGMENTS WITH SAND , TRACE SILT, TRACE CLAY, WET	766.2	18	22	50	89	SS-9	-	-	-	-	-	-	-	-	-	17	A-1-b (V)	
@18.5': ENCOUNTERED ARTESIAN AQUIFER. ARTESIAN FLOW RATE INCREASED WITH DEPTH.	765.2	19	22	25														
DENSE, GRAY, COARSE AND FINE SAND , LITTLE GRAVEL, TRACE SILT, TRACE CLAY, WET	763.7	20	18	42	50	SS-10	-	-	-	-	-	-	-	-	-	20	A-3a (V)	
DENSE, GRAY, GRAVEL AND STONE FRAGMENTS , LITTLE SAND, TRACE SILT, TRACE CLAY, WET	760.9	21	19	43	39	SS-11	-	-	-	-	-	-	-	-	-	12	A-1-a (V)	
DENSE, GRAY, COARSE AND FINE SAND , LITTLE GRAVEL, TRACE SILT, TRACE CLAY, WET	758.2	22	19	22														
		23																
		24																
		25	9	16	49	100	SS-12	-	-	-	-	-	-	-	-	23	A-3a (V)	
		26	16	30														

NOTES: ARTESIAN GROUNDWATER ENCOUNTERED AT 18.5'.
 ABANDONMENT METHODS, MATERIALS, QUANTITIES: PLACED 0.5 BAG ASPHALT PATCH; POURED 3 BAGS BENTONITE POWDER; POURED 4 BAGS HOLE PLUG

APPENDIX C

EXTERNAL STABILITY ANALYSES

Objective: To evaluate the external stability of CIP wall design with broken backsloping backfill.
Method: In accordance with ODOT Bridge Design Manual, 2021 [Sect. 204.6.2.2] LRFD Bridge Design Specifications, 9th Ed., 2020, [Sect. 11.6.1, Sect. 11.6.2, and Sect. 11.6.3].

Givens:

Backfill Soil Design Parameters:

$\phi'_f := 30 \text{ deg}$ Effective angle of internal friction

$\gamma_f := 120 \frac{\text{lb}}{\text{ft}^3}$ Unit weight

$c'_f := 0 \frac{\text{lb}}{\text{ft}^2}$ Effective Cohesion

$\delta := 0.67 \cdot \phi'_f \quad \delta = 20.1 \text{ deg}$ Friction angle between backfill and wall taken as specified in **LRFD BDS C3.11.5.3 (degrees)**

Foundation Soil Design Parameters:

Drained Conditions (Effective Stress):

$\phi'_{fd} := 23 \text{ deg}$ Effective angle of internal friction

$\gamma_{fd} := 120 \frac{\text{lb}}{\text{ft}^3}$ Unit weight

$c'_{fd} := 150 \frac{\text{lb}}{\text{ft}^2}$ Effective Cohesion

$\delta_{fd} := 0.67 \cdot \phi'_{fd} \quad \delta_{fd} = 15.4 \text{ deg}$ Friction angle between foundation soils and footing taken as specified in **LRFD BDS C3.11.5.3 (degrees)**

Undrained Conditions (Total Stress):

$\phi_{fdu} := 0 \text{ deg}$ Angle of internal friction (Same as Drained Conditions if granular soils)

$\gamma_{fd} = 120 \frac{\text{lb}}{\text{ft}^3}$ Unit weight

$Su_{fdu} := 1300 \frac{\text{lb}}{\text{ft}^2}$ Undrained Shear Strength

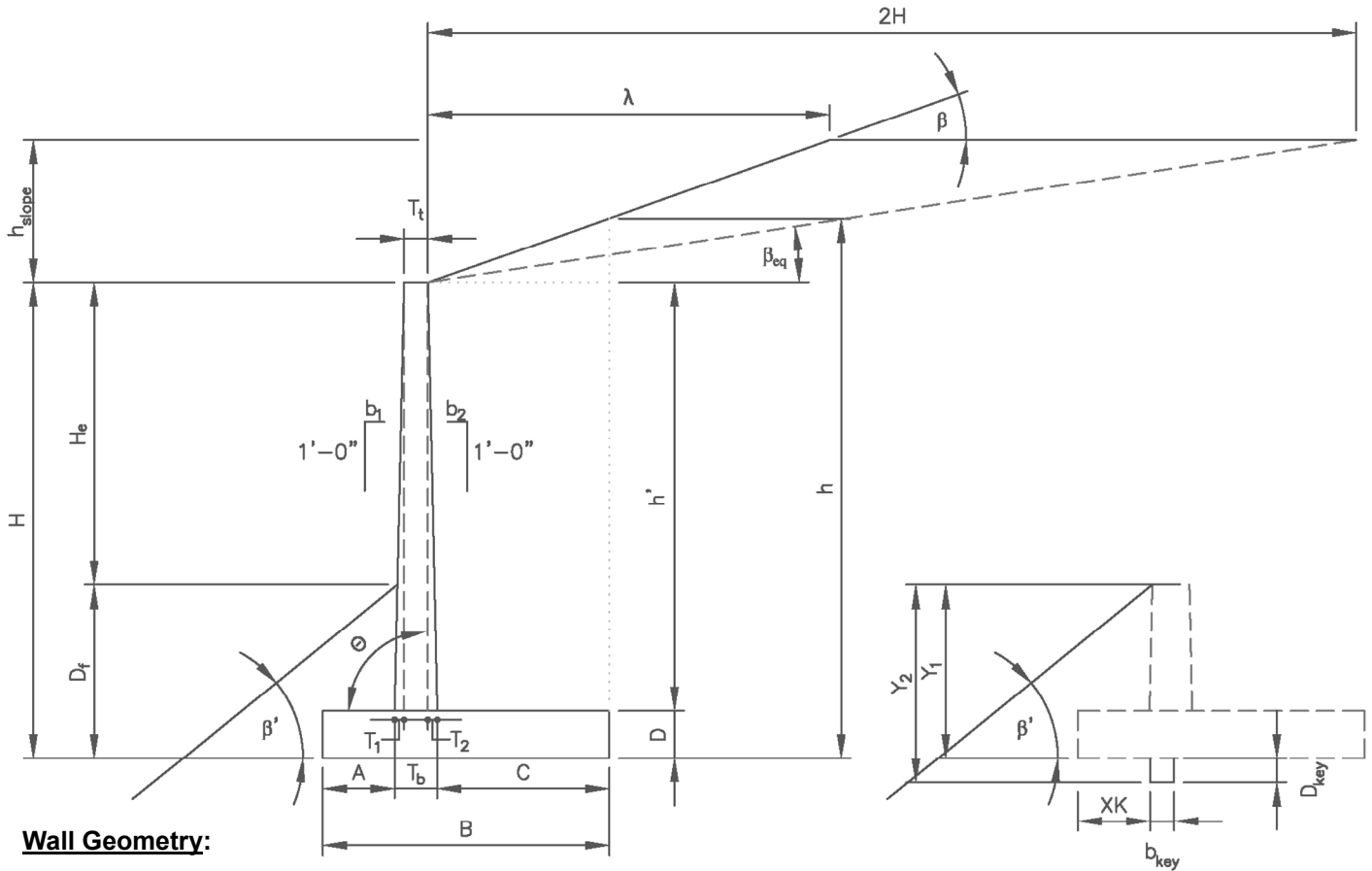
$\delta_{fdu} := 0.67 \cdot \phi_{fdu} \quad \delta_{fdu} = 0 \text{ deg}$ Friction angle between foundation soils and footing taken as specified in **LRFD BDS C3.11.5.3 (degrees)**

Foundation Surcharge Soil Parameters:

$\gamma_q := 120 \frac{\text{lb}}{\text{ft}^3}$ Unit weight of Soil above bearing depth (Used in Bearing Resistance of Soil Calculation LRFD 10.6.3.1.2a-1)

Other Parameters:

$\gamma_c := 150 \frac{\text{lb}}{\text{ft}^3}$ Concrete Unit weight



Wall Geometry:

$H_e := 6.125 \text{ ft}$

$D_f := 6.75 \text{ ft}$

$H := H_e + D_f \quad H = 12.9 \text{ ft}$

$T_t := 15 \text{ in}$

$b_1 := 0 \cdot \left(\frac{\text{in}}{\text{ft}}\right)$

$b_2 := 0 \cdot \left(\frac{\text{in}}{\text{ft}}\right)$

Preliminary Wall Dimensioning:

$B := 6.25 \text{ ft}$

$A := 4 \text{ ft}$

$D := 2.5 \text{ ft}$

Exposed wall height

Footing cover at Toe

Note: Where the potential for scour, erosion of undermining exists, spread footings shall be located to bear below the maximum depth of scour or undermining. Spread footings shall be located below the depth of potential frost. **LRFD BDS 10.6.1.2**

Design Wall Height

Stem thickness at top of wall

Frontwall batter, (b1H:12V)

Backwall batter, (b2H:12V)

www.enr.com for more information.

Shear Key Dimensioning:

$$D_{key} := 1.5 \text{ ft}$$

$$b_{key} := 1.5 \text{ ft}$$

$$XK := 0 \text{ ft}$$

Depth of shear key from bottom of footing

Note: Footings on rock typically require shear key

Width of shear key

Distance from toe to shear key

Other Wall Dimensions:

$$h' := H - D$$

$$h' = 10.4 \text{ ft}$$

Stem height

$$T_1 := b_1 \cdot h'$$

$$T_1 = 0 \text{ ft}$$

Stem front batter width

$$T_2 := b_2 \cdot h'$$

$$T_2 = 0 \text{ ft}$$

Stem back batter width

$$T_b := T_1 + T_2 + T_t$$

$$T_b = 1.25 \text{ ft}$$

Stem thickness at bottom of wall

$$C := B - A - T_b$$

$$C = 1 \text{ ft}$$

Heel projection

$$\theta := 90 \text{ deg}$$

Angle of back face of wall to horizontal = $\text{atan}(12/b_2)$

$$b := 12 \text{ in}$$

$$b = 1 \text{ ft}$$

Concrete strip width (for design)

$$y_1 := 0 \text{ ft}$$

$$y_1 = 0 \text{ ft}$$

Depth to where passive pressure may begin to be utilized in front of wall.

$$y_2 := D_f + D_{key}$$

$$y_2 = 8.3 \text{ ft}$$

Bottom of shear key/footing depth i.e. depth to where passive pressure may no longer be utilized.

Site Grading and Slope Dimensions:

$$\beta := 26.565 \text{ deg}$$

Inclination of ground slope:

- Horizontal: **0**
- 3H:1V: **18.435**
- 2H:1V: **26.565**
- 1.5H:1V: **33.690**

Inclination of ground slope behind face of wall.
Horizontal backfill behind CIP wall, $\beta = 0 \text{ deg}$

$$\beta' := 0 \text{ deg}$$

Inclination of ground slope in front of wall. If it is horizontal backfill in front of CIP wall, $\beta' = 0 \text{ deg}$. A negative angle (-) indicates grades slope up from front of wall. Positive angle (+) indicates grade slope down from wall as shown in above figure.

$$\lambda := 20 \text{ ft}$$

Horizontal distance from the back of the wall to point of slope crest .

$$L_{Traffic} := 20 \text{ ft}$$

Horizontal distance from assumed traffic surcharge load to Backface of Wall.

$$2 \cdot H = 25.8 \text{ ft}$$

IF λ IS GREATER THAN $2 \cdot H$ - USE INFINITE SLOPE CALCULATION SHEET

$$h_{slope} := \lambda \cdot \tan(\beta)$$

$$h_{slope} = 10 \text{ ft}$$

Height of broken slope behind wall

$$\beta_{eq} := \text{atan}\left(\frac{h_{slope}}{2 \cdot H}\right) = 21.2 \text{ deg}$$

Equivalent backslope angle

$$h := \text{if}(\lambda \leq T_2 + C, H + h_{slope}, H + (T_2 + C) \cdot \tan(\beta)) = 13.4 \text{ ft}$$

Height of retained fill at back of heel

Live Load Surcharge Parameters:

$$SUR := \text{if} \left(L_{\text{Traffic}} < \frac{H}{2}, 250 \frac{\text{lb}f}{\text{ft}^2}, 0 \frac{\text{lb}f}{\text{ft}^2} \right) = 0 \frac{\text{lb}f}{\text{ft}^2}$$

Live load surcharge (per LRFD BDS [3.11.6.4])

Note: A live load surcharge shall be applied where vehicular load is expected to act on the surface of the backfill within a distance equal to one-half the wall height behind the back face of the wall, see LRFD BDS Section 3.11.6.4 and Table 3.11.6.4-2 .

Calculations:

Earth Pressure Coefficients:

Backfill Active Earth:

$$\Gamma := \left(1 + \sqrt{\frac{(\sin(\phi'_{fd} + \delta) \cdot \sin(\phi'_{fd} - \beta_{eq}))}{(\sin(\theta - \delta) \cdot \sin(\theta + \beta_{eq}))}} \right)^2 \quad \Gamma = 1.865$$

$$k_{af} := \left(\frac{(\sin(\theta + \phi'_{fd}))^2}{(\Gamma \cdot (\sin(\theta))^2 \cdot \sin(\theta - \delta))} \right) \quad k_{af} = 0.428$$

Active Earth Pressure Coefficient
(per LRFD Sect. 3.11.5.3)

Foundation Soil Passive Earth:

Drained Conditions assuming ($\phi'_{fd} > 0$):

Input Parameters for LRFD Figure 3.11.5.4-2, assumes $\theta = 90$ degrees

$$\frac{-\beta'}{\phi'_{fd}} = 0$$

$$\frac{-\delta_{fd}}{\phi'_{fd}} = -0.67$$

$$k'_p := 3.75$$

Passive Earth Pressure Coefficient
from LRFD Figure 3.11.5.4-2

Determine Reduction Factor (R) by interpolation:

$$R_d := 0.909$$

Reduction Factor

$$k_{pd} := R_d \cdot k'_p$$

$$k_{pd} = 3.409$$

Passive Earth Pressure Coefficient for
Drained Conditions

Undrained Conditions ($\phi_{fdu} > 0$): **Note:** Expand window below to complete calculation

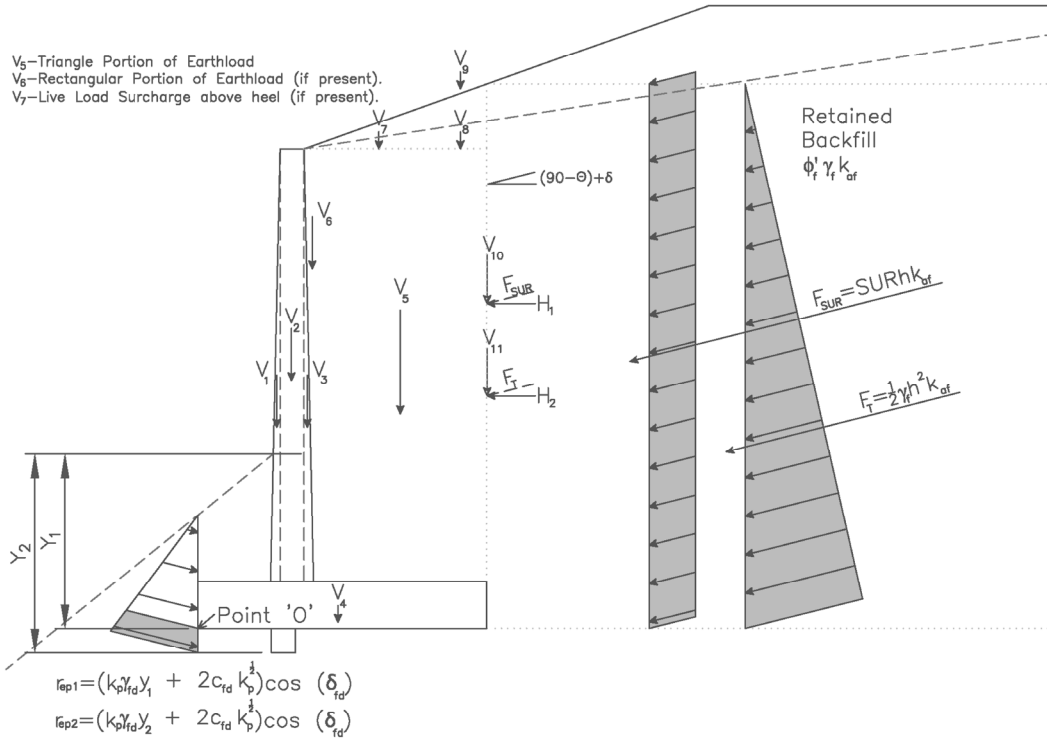
Undrained Conditions:

$$k_{pu} := \text{if}(\phi_{fdu} > 0, k_{pu}, 1)$$

$$k_{pu} = 1$$

Passive Earth Pressure Coefficient for
Resistance Undrained Conditions

Compute Unfactored Loads LRFD [Tables 3.4.1-1 and 3.4.1-2]:



$$F_T := \frac{1}{2} \cdot \gamma_f \cdot h^2 \cdot k_{af}$$

$$F_T = 4596.2 \frac{\text{lbf}}{\text{ft}}$$

Active Earth Force Resultant (EH)

$$F_{SUR} := SUR \cdot h \cdot k_{af}$$

$$F_{SUR} = 0 \frac{\text{lbf}}{\text{ft}}$$

Live Load Surcharge (LS)

Vertical Loads:

$$V_1 := \frac{1}{2} \cdot T_1 \cdot h' \cdot \gamma_c$$

$$V_1 = 0 \frac{\text{lbf}}{\text{ft}}$$

Wall stem front batter (DC)

$$V_2 := T_1 \cdot h' \cdot \gamma_c$$

$$V_2 = 1945.3 \frac{\text{lbf}}{\text{ft}}$$

Wall stem (DC)

$$V_3 := \frac{1}{2} \cdot T_2 \cdot h' \cdot \gamma_c$$

$$V_3 = 0 \frac{\text{lbf}}{\text{ft}}$$

Wall stem back batter (DC)

$$V_4 := D \cdot B \cdot \gamma_c$$

$$V_4 = 2343.8 \frac{\text{lbf}}{\text{ft}}$$

Wall Footing (DC)

$$V_5 := C \cdot h' \cdot \gamma_f$$

$$V_5 = 1245 \frac{\text{lbf}}{\text{ft}}$$

Soil Backfill - Heel (EV)

$$V_6 := \frac{1}{2} \cdot T_2 \cdot h' \cdot \gamma_f$$

$$V_6 = 0 \frac{\text{lbf}}{\text{ft}}$$

Soil Backfill - Batter (EV)

$$V_7 := \text{if} \left(\lambda \leq T_2 + C, \frac{1}{2} \cdot \lambda^2 \cdot \tan(\beta) \cdot \gamma_f, \frac{1}{2} \cdot (T_2 + C)^2 \cdot \tan(\beta) \cdot \gamma_f \right)$$

$$V_7 = 30 \frac{\text{lbf}}{\text{ft}}$$

Soil Backfill - Backslope
Triangle Portion (EV)

$$V_8 := \text{if} \left(\lambda \leq T_2 + C, (T_2 + C - \lambda) \cdot h_{slope} \cdot \gamma_f, 0 \cdot \frac{\text{lbf}}{\text{ft}} \right)$$

$$V_8 = 0 \frac{\text{lbf}}{\text{ft}}$$

Soil Backfill - Backslope
Rectangular Portion (EV)

$$V_9 := \text{if} \left(\lambda \leq T_2 + C, (T_2 + C - \lambda) \cdot SUR, 0 \cdot \frac{\text{lbf}}{\text{ft}} \right)$$

$$V_9 = 0 \frac{\text{lbf}}{\text{ft}}$$

Live Load Surcharge Above Heel - (LS)

$$V_{10} := F_{SUR} \cdot \sin(90 \cdot \text{deg} - \theta + \delta)$$

$$V_{10} = 0 \frac{\text{lbf}}{\text{ft}}$$

Live Load Surcharge Resultant (vertical comp. - LS)

$$V_{11} := F_T \cdot \sin(90 \cdot \text{deg} - \theta + \delta)$$

$$V_{11} = 1579.5 \frac{\text{lbf}}{\text{ft}}$$

Active earth force resultant (vertical component - EH)

Moment Arm:

Moments produced from vertical loads about Point 'O'

$$d_{v1} := A + \frac{2}{3} \cdot T_1 = 4 \text{ ft}$$

$$MV_1 := V_1 \cdot d_{v1} = 0 \text{ lbf}$$

$$d_{v2} := A + T_1 + \frac{T_1}{2} = 4.6 \text{ ft}$$

$$MV_2 := V_2 \cdot d_{v2} = 8997.1 \text{ lbf}$$

$$d_{v3} := A + T_1 + T_1 + \frac{T_2}{3} = 5.3 \text{ ft}$$

$$MV_3 := V_3 \cdot d_{v3} = 0 \text{ lbf}$$

$$d_{v4} := \frac{B}{2} = 3.1 \text{ ft}$$

$$MV_4 := V_4 \cdot d_{v4} = 7324.2 \text{ lbf}$$

$$d_{v5} := B - \frac{C}{2} = 5.8 \text{ ft}$$

$$MV_5 := V_5 \cdot d_{v5} = 7158.8 \text{ lbf}$$

$$d_{v6} := A + T_1 + T_1 + \frac{2 \cdot T_2}{3} = 5.3 \text{ ft}$$

$$MV_6 := V_6 \cdot d_{v6} = 0 \text{ lbf}$$

$$d_{v7} := \text{if} \left(\lambda \leq T_2 + C, A + T_1 + T_1 + \left(\frac{2}{3} (\lambda) \right), A + T_1 + T_1 + \left(\frac{2}{3} (T_2 + C) \right) \right) = 5.9 \text{ ft}$$

$$MV_7 := V_7 \cdot d_{v7} = 177.5 \text{ lbf}$$

$$d_{v8} := A + T_1 + T_1 + \lambda + \left(\frac{T_2 + C - \lambda}{2} \right) = 15.8 \text{ ft}$$

$$MV_8 := V_8 \cdot d_{v8} = 0 \text{ lbf}$$

$$d_{v9} := A + T_1 + T_1 + \lambda + \left(\frac{T_2 + C - \lambda}{2} \right) = 15.8 \text{ ft}$$

$$MV_9 := V_9 \cdot d_{v9} = 0 \text{ lbf}$$

$$d_{v10} := B = 6.3 \text{ ft}$$

$$MV_{10} := V_{10} \cdot d_{v10} = 0 \text{ lbf}$$

$$d_{v11} := B = 6.3 \text{ ft}$$

$$MV_{11} := V_{11} \cdot d_{v11} = 9872.1 \text{ lbf}$$

Horizontal Loads:

$$H_1 := F_{SUR} \cdot \cos(90 \cdot \text{deg} - \theta + \delta)$$

$$H_1 = 0 \frac{\text{lbf}}{\text{ft}}$$

Live Load Surcharge Resultant (horizontal comp. - LS)

$$H_2 := F_T \cdot \cos(90 \cdot \text{deg} - \theta + \delta)$$

$$H_2 = 4316.3 \frac{\text{lbf}}{\text{ft}}$$

Active Earth Force Resultant (horizontal comp. - EH)

Moment Arm:

$$d_{h1} := \frac{h}{2}$$

$$d_{h1} = 6.7 \text{ ft}$$

$$MH_1 := H_1 \cdot d_{h1}$$

$$MH_1 = 0 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

$$d_{h2} := \frac{h}{3}$$

$$d_{h2} = 4.5 \text{ ft}$$

$$MH_2 := H_2 \cdot d_{h2}$$

$$MH_2 = 19243.4 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

Unfactored Loads by Load Type:

$$V_{DC} := V_1 + V_2 + V_3 + V_4 \quad V_{DC} = 4289.1 \frac{\text{lb}}{\text{ft}} \quad V_{EV} := V_5 + V_6 + V_7 + V_8 \quad V_{EV} = 1275 \frac{\text{lb}}{\text{ft}}$$

$$V_{LS_Ia} := V_{10} \quad V_{LS_Ia} = 0 \frac{\text{lb}}{\text{ft}} \quad V_{LS_Ib} := V_9 + V_{10} \quad V_{LS_Ia} = 0 \frac{\text{lb}}{\text{ft}}$$

$$V_{EH} := V_{11} \quad V_{EH} = 1579.5 \frac{\text{lb}}{\text{ft}}$$

$$H_{EH} := H_2 \quad H_{EH} = 4316.3 \frac{\text{lb}}{\text{ft}} \quad H_{LS} := H_1 \quad H_{LS} = 0 \frac{\text{lb}}{\text{ft}}$$

Unfactored Moments by Load Type

$$M_{DC} := MV_1 + MV_2 + MV_3 + MV_4 \quad M_{DC} = 16321.3 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{EV} := MV_5 + MV_6 + MV_7 + MV_8 \quad M_{EV} = 7336.2 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{LSV_Ia} := MV_{10} \quad M_{LSV_Ia} = 0 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{LSV_Ib} := MV_9 + MV_{10} \quad M_{LSV_Ib} = 0 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{EH1} := MV_{11} \quad M_{EH1} = 9872.1 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{LSH} := MH_1 \quad M_{LSH} = 0 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{EH2} := MH_2 \quad M_{EH2} = 19243.4 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

Load Combination Limit States:

$\eta := 1$ LRFD Load Modifier

Strength Limit State I: EV(min) = 1.00 EV(max) = 1.35
EH(min) = 0.90 EH(max) = 1.50
LS = 1.75

Strength Limit State Ia: (Sliding and Eccentricity)	$Ia_{DC} := 0.9$	$Ia_{EV} := 1$	$Ia_{EH} := 1.5$	$Ia_{LS} := 1.75$
Strength Limit State Ib: (Bearing Capacity)	$Ib_{DC} := 1.25$	$Ib_{EV} := 1.35$	$Ib_{EH} := 1.5$	$Ib_{LS} := 1.75$

Factored Vertical Loads by Limit State:

$$V_{Ia} := \eta \cdot ((Ia_{DC} \cdot V_{DC}) + (Ia_{EV} \cdot V_{EV}) + (Ia_{EH} \cdot V_{EH}) + (Ia_{LS} \cdot V_{LS_Ia})) \quad V_{Ia} = 7504.5 \frac{\text{lbf}}{\text{ft}}$$

$$V_{Ib} := \eta \cdot ((Ib_{DC} \cdot V_{DC}) + (Ib_{EV} \cdot V_{EV}) + (Ib_{EH} \cdot V_{EH}) + (Ib_{LS} \cdot V_{LS_Ib})) \quad V_{Ib} = 9451.9 \frac{\text{lbf}}{\text{ft}}$$

Factored Horizontal Loads by Limit State:

$$H_{Ia} := \eta \cdot ((Ia_{LS} \cdot H_{LS}) + (Ia_{EH} \cdot H_{EH})) \quad H_{Ia} = 6474.4 \frac{\text{lbf}}{\text{ft}}$$

$$H_{Ib} := \eta \cdot ((Ib_{LS} \cdot H_{LS}) + (Ib_{EH} \cdot H_{EH})) \quad H_{Ib} = 6474.4 \frac{\text{lbf}}{\text{ft}}$$

Factored Moments Produced by Vertical Loads by Limit State:

$$MV_{Ia} := \eta \cdot ((Ia_{DC} \cdot M_{DC}) + (Ia_{EV} \cdot M_{EV}) + (Ia_{EH} \cdot M_{EH1}) + (Ia_{LS} \cdot M_{LSV_Ia})) \quad MV_{Ia} = 36833.5 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

$$MV_{Ib} := \eta \cdot ((Ib_{DC} \cdot M_{DC}) + (Ib_{EV} \cdot M_{EV}) + (Ib_{EH} \cdot M_{EH1}) + (Ib_{LS} \cdot M_{LSV_Ib})) \quad MV_{Ib} = 45113.7 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

Factored Moments Produced by Horizontal Loads by Limit State:

$$MH_{Ia} := \eta \cdot ((Ia_{LS} \cdot M_{LSH}) + (Ia_{EH} \cdot M_{EH2})) \quad MH_{Ia} = 28865.1 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

$$MH_{Ib} := \eta \cdot ((Ib_{LS} \cdot M_{LSH}) + (Ib_{EH} \cdot M_{EH2})) \quad MH_{Ib} = 28865.1 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

Compute Bearing Resistance:

Compute the resultant location about the toe of the base length (distance from "O") Strength lb:

$\Sigma M_R := MV_{lb}$	$\Sigma M_R = 45113.7 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$	Sum of Resisting Moments (Strength lb)
$\Sigma M_O := MH_{lb}$	$\Sigma M_O = 28865.1 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$	Sum of Overturning Moments (Strength lb)
$\Sigma V := V_{lb}$	$\Sigma V = 9451.9 \frac{\text{lb}}{\text{ft}}$	Sum of Vertical Loads (Strength lb)
$x := \frac{(\Sigma M_R - \Sigma M_O)}{\Sigma V}$	$x = 1.7 \text{ ft}$	Distance from Point "O" the resultant intersects the base

$e := \left \frac{B}{2} - x \right $	$e = 1.41 \text{ ft}$	Wall eccentricity, Note: The vertical stress is assumed to be uniformly distributed over the effective bearing width, B', since the wall is supported by a soil foundation LRFD [11.6.3.2] . The effective bearing width is equal to B-2e.
---------------------------------------	-----------------------	--

Foundation Layout:

$B' := B - 2 \cdot e$	$B' = 3.4 \text{ ft}$	Effective Footing Width
$L' := 67.5 \text{ ft}$		Effective Footing Length (Assumed)
$H' := H_{lb}$	$H' = 6474.4 \frac{\text{lb}}{\text{ft}}$	Summation of Horizontal Loads (Strength lb)
$V' := V_{lb}$	$V' = 9451.9 \frac{\text{lb}}{\text{ft}}$	Summation of Vertical Loads (Strength lb)
$D_f = 6.8 \text{ ft}$		Footing embedment

$d_w := 0 \text{ ft}$		Depth of Groundwater below ground surface at front of wall.
-----------------------	--	---

Drained Conditions (Effective Stress):

$N_q := \text{if} \left(\phi'_{fd} > 0, e^{\pi \cdot \tan(\phi'_{fd})} \cdot \tan \left(45 \text{ deg} + \frac{\phi'_{fd}}{2} \right), 1.0 \right)$	$N_q = 8.66$
$N_c := \text{if} \left(\phi'_{fd} > 0, \frac{N_q - 1}{\tan(\phi'_{fd})}, 5.14 \right)$	$N_c = 18.05$
$N_y := 2 \cdot (N_q + 1) \cdot \tan(\phi'_{fd})$	$N_y = 8.2$

Compute shape correction factors per LRFD [Table 10.6.3.1.2a-3]:

$s_c := \text{if} \left(\phi'_{fd} > 0, 1 + \left(\frac{B'}{L'} \right) \cdot \left(\frac{N_q}{N_c} \right), 1 + \left(\frac{B'}{5 \cdot L'} \right) \right)$	$s_c = 1.024$
$s_q := \text{if} \left(\phi'_{fd} > 0, 1 + \left(\frac{B'}{L'} \cdot \tan(\phi'_{fd}) \right), 1 \right)$	$s_q = 1.022$
$s_y := \text{if} \left(\phi'_{fd} > 0, 1 - 0.4 \cdot \left(\frac{B'}{L'} \right), 1 \right)$	$s_y = 0.98$

Load inclination factors:

$$i_q := 1$$

$$i_\gamma := 1$$

$$i_c := 1$$

Assumed to be 1.0, see **LRFD BDS C10.6.3.1.2a**.
"Most geotechnical engineers do not used the load inclination factors". If desired, use LRFD Equations [10.6.3.1.2a-5] thru [10.6.3.1.2a-9].

Compute groundwater depth correction factors per LRFD [Table 10.6.3.1.2a-2]:

$$C_{wq} := \text{if}(d_w \geq D_f, 1.0, 0.5) \quad C_{wq} = 0.5$$

$$C_{wy} := \text{if}(d_w \geq (1.5 \cdot B) + D_f, 1.0, 0.5) \quad C_{wy} = 0.5$$

Depth Correction Factor per Hanson (1970):

$$d_q := 1 + 2 \cdot \tan(\phi'_{fd}) \cdot (1 - \sin(\phi'_{fd}))^2 \cdot \text{atan}\left(\frac{D_f}{B'}\right)$$

$$d_q = 1.35$$

Compute modified bearing capacity factors LRFD [Equation 10.6.3.1.2a-2 to 10.6.3.1.2a-4]:

$$N_{cm} := N_c \cdot s_c \cdot i_c \quad N_{cm} = 18.49$$

$$N_{qm} := N_q \cdot s_q \cdot d_q \cdot i_q \quad N_{qm} = 11.915$$

$$N_{\gamma m} := N_\gamma \cdot s_\gamma \cdot i_\gamma \quad N_{\gamma m} = 8.035$$

Compute nominal bearing resistance, LRFD [Eq 10.6.3.1.2a-1]:

$$q_{nd} := c'_{fd} \cdot N_{cm} + \gamma_q \cdot D_f \cdot N_{qm} \cdot C_{wq} + 0.5 \cdot \gamma_{fd} \cdot B' \cdot N_{\gamma m} \cdot C_{wy} \quad q_{nd} = 8427.8 \frac{\text{lb}}{\text{ft}^2}$$

Compute factored bearing resistance, LRFD [Eq 10.6.3.1.1]:

$$\phi_b := .55$$

Bearing resistance factor LRFD Table 11.5.7-1.

$$q_{Rd} := \phi_b \cdot q_{nd} \quad q_{Rd} = 4.6 \text{ ksf}$$

Factored bearing resistance Drained Conditions

Undrained Conditions (Effective Stress):

$$N_q := \text{if}\left(\phi_{fd} > 0, e^{\pi \cdot \tan(\phi_{fd})} \cdot \tan\left(45 \text{ deg} + \frac{\phi_{fd}}{2}\right), 1.0\right) \quad N_q = 1$$

$$N_c := \text{if}\left(\phi_{fd} > 0, \frac{N_q - 1}{\tan(\phi_{fd})}, 5.14\right) \quad N_c = 5.14$$

$$N_\gamma := 2 \cdot (N_q + 1) \cdot \tan(\phi_{fd}) \quad N_\gamma = 0$$

Compute shape correction factors per LRFD [Table 10.6.3.1.2a-3]:

$$s_c := \text{if} \left(\phi_{fd} > 0, 1 + \left(\frac{B'}{L'} \right) \cdot \left(\frac{N_q}{N_c} \right), 1 + \left(\frac{B'}{5 \cdot L'} \right) \right) \quad s_c = 1.01$$

$$s_q := \text{if} \left(\phi_{fd} > 0, 1 + \left(\frac{B'}{L'} \right) \cdot \tan(\phi_{fd}), 1 \right) \quad s_q = 1$$

$$s_\gamma := \text{if} \left(\phi_{fd} > 0, 1 - 0.4 \cdot \left(\frac{B'}{L'} \right), 1 \right) \quad s_\gamma = 1$$

Load inclination factors:

$$i_q := 1$$

$$i_\gamma := 1$$

$$i_c := 1$$

Assumed to be 1.0, see LRFD BDS C10.6.3.1.2a. "Most geotechnical engineers do not use the load inclination factors". If desired, use LRFD Equations [10.6.3.1.2a-5] thru [10.6.3.1.2a-9].

Depth Correction Factor per Hanson (1970):

$$d_q := 1 + 2 \cdot \tan(\phi'_{fd}) \cdot (1 - \sin(\phi'_{fd}))^2 \cdot \text{atan} \left(\frac{D_f}{B'} \right)$$

$$d_q = 1.35$$

Compute modified bearing capacity factors LRFD [Equation 10.6.3.1.2a-2 to 10.6.3.1.2a-4]:

$$N_{cm} := N_c \cdot s_c \cdot i_c \quad N_{cm} = 5.192$$

$$N_{qm} := N_q \cdot s_q \cdot d_q \cdot i_q \quad N_{qm} = 1.347$$

$$N_{\gamma m} := N_\gamma \cdot s_\gamma \cdot i_\gamma \quad N_{\gamma m} = 0$$

Compute nominal bearing resistance, LRFD [Eq 10.6.3.1.2a-1]:

$$q_{nu} := S u_{fd} \cdot N_{cm} + \gamma_q \cdot D_f \cdot N_{qm} \cdot C_{wq} + 0.5 \cdot \gamma_{fd} \cdot B' \cdot N_{\gamma m} \cdot C_{w\gamma} \quad q_{nu} = 7295.4 \frac{\text{lbf}}{\text{ft}^2}$$

Compute factored bearing resistance, LRFD [Eq 10.6.3.1.1]:

$$\phi_b := .55$$

$$q_{Ru} := \phi_b \cdot q_{nu} \quad q_{Ru} = 4 \text{ ksf}$$

Bearing resistance factor LRFD Table 11.5.7-1.

Factored bearing resistance Undrained Conditions

Factored Bearing Resistance Drained vs. Undrained Conditions:

Drained Conditions: $q_{Rd} = 4.6 \text{ ksf}$

Undrained Conditions: $q_{Ru} = 4 \text{ ksf}$

Evaluate External Stability of Wall:

Compute the factored bearing stress :

$$e = 1.41 \text{ ft}$$

$$\sigma_V := \frac{\Sigma V}{B - 2 \cdot e} \quad \sigma_V = 2.749 \text{ ksf}$$

Bearing Capacity:Demand Ratio (CDR)

Drained Conditions:	$CDR_{Bearing_D} := \frac{q_{Rd}}{\sigma_V}$	Is the CDR > or = to 1.0?	$CDR_{Bearing_D} = 1.69$
---------------------	---	---------------------------	---------------------------

Undrained Conditions:	$CDR_{Bearing_U} := \frac{q_{Ru}}{\sigma_V}$	Is the CDR > or = to 1.0?	$CDR_{Bearing_U} = 1.46$
-----------------------	---	---------------------------	---------------------------

Limiting Eccentricity at Base of Wall (Strength Ia):

Compute the resultant location about the toe "O" of the base length (distance from Pivot):

$$e_{max} := \frac{B}{3}$$

$$e_{max} = 2.1 \text{ ft}$$

Maximum Eccentricity **LRFD [C11.6.3.3.]**
Equals B/3 for soil.

$$\Sigma M_R := MV_{Ia}$$

$$\Sigma M_R = 36833.5 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

Sum of Resisting Moments (Strength Ia)

$$\Sigma M_O := MH_{Ia}$$

$$\Sigma M_O = 28865.1 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

Sum of Overturning Moments (Strength Ia)

$$\Sigma V := V_{Ia}$$

$$\Sigma V = 7504.5 \frac{\text{lb}}{\text{ft}}$$

Sum of Vertical Loads (Strength Ia)

$$x := \frac{(\Sigma M_R - \Sigma M_O)}{\Sigma V}$$

$$x = 1.1 \text{ ft}$$

Distance from Point "O" the resultant intersects the base

$$e := \left| \frac{B}{2} - x \right|$$

$$e = 2.06 \text{ ft}$$

Wall eccentricity, **Note:** The vertical stress is assumed to be uniformly distributed over the effective bearing width, B', since the wall is supported by a soil foundation **LRFD [11.6.3.2]**. The effective bearing width is equal to B-2e. .

Eccentricity Capacity:Demand Ratio (CDR)

$$CDR_{Eccentricity} := \frac{e_{max}}{e}$$

Is the CDR > or = to 1.0?

$$CDR_{Eccentricity} = 1.01$$

Sliding Resistance at Base of Wall LRFD [10.6.3.4]:

Factored Sliding Force (Strength Ia):

$$R_u := H_{Ia} \qquad R_u = 6474.4 \frac{\text{lb}}{\text{ft}}$$

Drained Conditions (Effective Stress):

Compute passive resistance throughout the design life of the wall LRFD [Eq 3.11.5.4-1]:

$$r_{ep1} := (k_{pd} \cdot \gamma_{fd} \cdot y_1 + 2 \cdot c'_{fd} \cdot \sqrt{k_{pd}}) \cdot \cos(\delta_{fd}) \qquad \text{Nominal passive pressure at } y_1$$

$$r_{ep2} := (k_{pd} \cdot \gamma_{fd} \cdot y_2 + 2 \cdot c'_{fd} \cdot \sqrt{k_{pd}}) \cdot \cos(\delta_{fd}) \qquad \text{Nominal passive pressure at } y_2$$

$$R_{ep} := \frac{r_{ep1} + r_{ep2}}{2} \cdot (y_2 - y_1) \qquad R_{ep} = 17825.3 \frac{\text{lb}}{\text{ft}} \qquad \text{Nominal passive resistance Drained Conditions}$$

416 Note: Passive Resistance shall be neglected in stability computations, unless the base of the wall extends below the depth of maximum scour, freeze-thaw or other disturbances. In the latter case, only the embedment below the greater of these depths shall be considered effective LRFD [11.6.3.5].

Compute sliding resistance between soil and foundation:

$$c := 1.0 \qquad c = 1.0 \text{ for Cast-in-Place} \\ c = 0.8 \text{ for Precast}$$

$$\Sigma V := V_{Ia} \qquad \Sigma V = 7504.5 \frac{\text{lb}}{\text{ft}} \qquad \text{Sum of Vertical Loads (Strength Ia)}$$

$$R_\tau := c \cdot \Sigma V \cdot \tan(\phi'_{fd}) \qquad R_\tau = 3185.5 \frac{\text{lb}}{\text{ft}} \qquad \text{Nominal sliding resistance Cohesionless Soils}$$

Compute factored resistance against failure by sliding LRFD [10.6.3.4]:

$$\phi_{ep} := 0.5$$

Resistance factor for passive resistance specified in LRFD Table 10.5.5.2.2-1

$$\phi_\tau := 1.0$$

Resistance factor for sliding resistance specified in LRFD Table 11.5.7-1.

$$\phi R_n := \phi_\tau \cdot R_\tau + \phi_{ep} \cdot R_{ep}$$

$$R_R := \phi R_n$$

Factored Sliding Resistance to be used in CDR Calculations:

$$R_R = 12098.098 \frac{\text{lb}}{\text{ft}}$$

Sliding Capacity:Demand Ratio (CDR)

$$CDR_{Sliding} := \frac{R_R}{R_u}$$

Is the CDR > or = to 1.0?

$$CDR_{Sliding} = 1.87$$

Undrained Conditions (Total Stress):

Compute passive resistance throughout the design life of the wall LRFD [Eq 3.11.5.4-1]:

$$r_{ep1} := (k_{pu} \cdot \gamma_{fd} \cdot y_1 + 2 \cdot Su_{fd} \cdot \sqrt{k_{pu}}) \cdot \cos(\delta_{fd}) \quad \text{Nominal passive pressure at } y_1$$

$$r_{ep2} := (k_{pu} \cdot \gamma_{fd} \cdot y_2 + 2 \cdot Su_{fd} \cdot \sqrt{k_{pu}}) \cdot \cos(\delta_{fd}) \quad \text{Nominal passive pressure at } y_2$$

$$R_{ep} := \frac{r_{ep1} + r_{ep2}}{2} \cdot (y_2 - y_1) \quad R_{ep} = 24615.8 \frac{\text{lb}}{\text{ft}} \quad \text{Nominal passive resistance Drained Conditions}$$

416 Note: Passive Resistance shall be neglected in stability computations, unless the base of the wall extends below the depth of maximum scour, freeze-thaw or other disturbances. In the latter case, only the embedment below the greater of these depths shall be considered effective LRFD [11.6.3.5].

Compute sliding resistance between soil and foundation:

$$c := 1.0 \quad c = 1.0 \text{ for Cast-in-Place}$$

$$c = 0.8 \text{ for Precast}$$

$$\Sigma V := V_{Ia} \quad \Sigma V = 7504.5 \frac{\text{lb}}{\text{ft}} \quad \text{Sum of Vertical Loads (Strength Ia)}$$

$$e = 2.06 \text{ ft} \quad \text{Wall eccentricity, Calculated in above Limiting Eccentricity at Base of Wall (Strength Ia) Section.}$$

$$B = 6.3 \text{ ft} \quad \text{Footing base width}$$

$$\frac{B}{6} = 1 \text{ ft} \quad \text{If } e < B/6 \text{ the resultant is in the middle one-third}$$

$$\sigma_{vmax} := \frac{\Sigma V}{B} \cdot \left(1 + 6 \cdot \frac{e}{B}\right) \quad \sigma_{vmax} = 3578.9 \frac{\text{lb}}{\text{ft}^2} \quad \text{Max vertical stress (if resultant is in the middle one-third of base) LRFD [11.6.3.2-2].}$$

$$\sigma_{vmin} := \frac{\Sigma V}{B} \cdot \left(1 - 6 \cdot \frac{e}{B}\right) \quad \sigma_{vmin} = -1177.5 \frac{\text{lb}}{\text{ft}^2} \quad \text{Max vertical stress (if resultant is in the middle one-third of base) LRFD [11.6.3.2-2].}$$

$$q_{max} := \frac{1}{2} \cdot \sigma_{vmax} \quad q_{max} = 1789.4 \frac{\text{lb}}{\text{ft}^2} \quad \text{Max unit shear resistance as 1/2 max vertical stress LRFD [10.6.3.4].}$$

$$q_{min} := \frac{1}{2} \cdot \sigma_{vmin} \quad q_{min} = -588.7 \frac{\text{lb}}{\text{ft}^2} \quad \text{Minimum unit shear resistance as 1/2 minimum vertical stress LRFD [10.6.3.4].}$$

Determine which Cohesive Soil Resistance Case is Present:

$$Case_1 := \text{if}(q_{max} > Su_{fd} > q_{min} \geq 0, 1, 0) \quad Case_1 = 0$$

$$Case_2 := \text{if}(Su_{fd} > q_{max} > q_{min} \geq 0, 1, 0) \quad Case_2 = 0$$

$$Case_3 := \text{if}(q_{max} > q_{min} > Su_{fd}, 1, 0) \quad Case_3 = 0$$

$$Case_4 := \text{if}(q_{min} < 0, \text{if}(Su_{fd} < q_{max}, 1, 0), 0) \quad Case_4 = 1$$

$$Case_5 := \text{if}(q_{min} < 0, \text{if}(Su_{fd} > q_{max}, 1, 0), 0) \quad Case_5 = 0$$

Unit Shear Resistance for Case 1:

$$S_1 := Su_{fd_u} - q_{min} = 1888.7 \frac{\text{lb}}{\text{ft}^2}$$

$$B_1 := \frac{B \cdot (Su_{fd_u} - q_{min})}{q_{max} - q_{min}} = 5 \text{ ft}$$

$$B_3 := B = 6.3 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B_1 = 4687.6 \frac{\text{lb}}{\text{ft}}$$

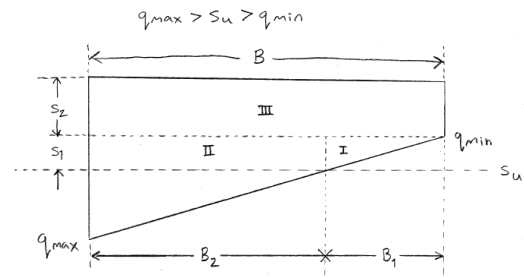
$$III := S_2 \cdot B_3 = -3679.6 \frac{\text{lb}}{\text{ft}}$$

$$R_{\tau_{case1}} := I + II + III = 3437.4 \frac{\text{lb}}{\text{ft}}$$

$$S_2 := q_{min} = -588.7 \frac{\text{lb}}{\text{ft}^2}$$

$$B_2 := \frac{B \cdot (q_{max} - Su_{fd_u})}{q_{max} - q_{min}} = 1.3 \text{ ft}$$

$$II := S_1 \cdot B_2 = 2429.5 \frac{\text{lb}}{\text{ft}}$$



Unit Shear Resistance for Case 2:

$$S_1 := q_{max} - q_{min} = 2378.2 \frac{\text{lb}}{\text{ft}^2}$$

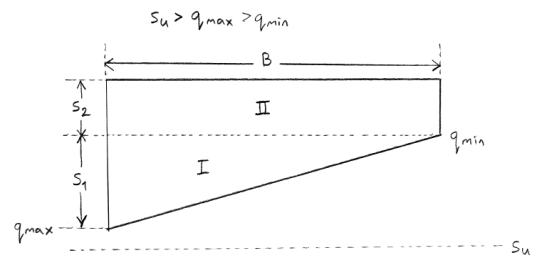
$$B = 6.3 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B = 7431.8 \frac{\text{lb}}{\text{ft}}$$

$$R_{\tau_{case2}} := I + II = 3752.2 \frac{\text{lb}}{\text{ft}}$$

$$S_2 := q_{min} = -588.7 \frac{\text{lb}}{\text{ft}^2}$$

$$II := S_2 \cdot B = -3679.6 \frac{\text{lb}}{\text{ft}}$$



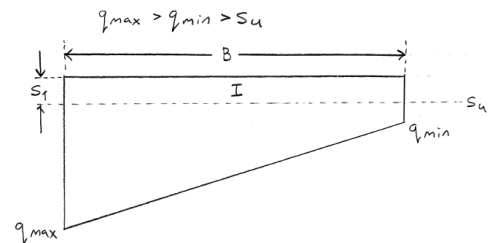
Unit Shear Resistance for Case 3:

$$S_1 := Su_{fd_u} = 1300 \frac{\text{lb}}{\text{ft}^2}$$

$$B = 6.3 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B = 4062.5 \frac{\text{lb}}{\text{ft}}$$

$$R_{\tau_{case3}} := I = 4062.5 \frac{\text{lb}}{\text{ft}}$$



Unit Shear Resistance for Case 4:

$$S_1 := Su_{fd_u} = 1300 \frac{\text{lb}}{\text{ft}^2}$$

$$B_3 := \frac{B \cdot (-q_{min})}{q_{max} - q_{min}} = 1.5 \text{ ft}$$

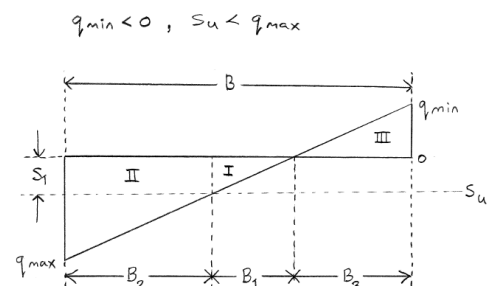
$$B_2 := B - (B_1 + B_3) = 1.3 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B_1 = 2220.7 \frac{\text{lb}}{\text{ft}}$$

$$R_{\tau_{case4}} := I + II = 3892.9 \frac{\text{lb}}{\text{ft}}$$

$$B_1 := \left(\frac{Su_{fd_u}}{q_{max}} \right) \cdot (B - B_3) = 3.4 \text{ ft}$$

$$II := S_1 \cdot B_2 = 1672.2 \frac{\text{lb}}{\text{ft}}$$



Unit Shear Resistance for Case 5:

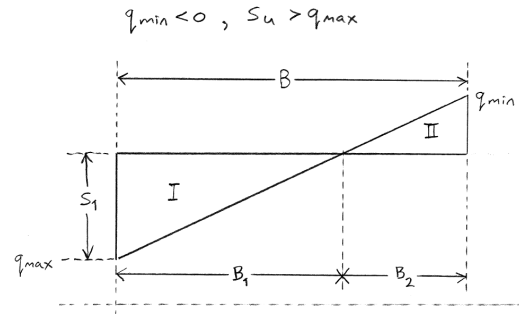
$$S_1 := q_{max} = 1789.4 \frac{lb}{ft^2}$$

$$B_1 := \frac{B \cdot q_{max}}{q_{max} - q_{min}} = 4.7 \text{ ft}$$

$$B_2 := B - B_1 = 1.5 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B_1 = 4207.7 \frac{lb}{ft}$$

$$R_{\tau_{case5}} := I = 4207.7 \frac{lb}{ft}$$



Define the Applicable Case:

$$R_{\tau} := R_{\tau_{case4}}$$

$$R_{\tau} = 3892.9 \frac{lb}{ft}$$

Nominal sliding resistance Cohesive Soils

Compute factored resistance against failure by sliding **LRFD [10.6.3.4]:**

$$\phi_{ep} := 0.5$$

Resistance factor for passive resistance specified in **LRFD Table 10.5.5.2.2-1**

$$\phi_{\tau} := 1.0$$

Resistance factor for sliding resistance specified in **LRFD Table 11.5.7-1.**

$$\phi R_n := \phi_{\tau} \cdot R_{\tau} + \phi_{ep} \cdot R_{ep}$$

$$R_R := \phi R_n$$

Factored Sliding Resistance to be used in CDR Calculations: $R_R = 16200.788 \frac{lb}{ft}$

Sliding Capacity: Demand Ratio (CDR)

$$CDR_{Sliding} := \frac{R_R}{R_u}$$

Is the CDR > or = to 1.0?

$$CDR_{Sliding} = 2.50$$

Objective: To evaluate the external stability of CIP wall design with broken backsloping backfill.
Method: In accordance with ODOT Bridge Design Manual, 2021 [Sect. 204.6.2.2] LRFD Bridge Design Specifications, 9th Ed., 2020, [Sect. 11.6.1, Sect. 11.6.2, and Sect. 11.6.3].

Givens:

Backfill Soil Design Parameters:

$\phi'_f := 30 \text{ deg}$ Effective angle of internal friction

$\gamma_f := 120 \frac{\text{lbf}}{\text{ft}^3}$ Unit weight

$c'_f := 0 \frac{\text{lbf}}{\text{ft}^2}$ Effective Cohesion

$\delta := 0.67 \cdot \phi'_f$ $\delta = 20.1 \text{ deg}$ Friction angle between backfill and wall taken as specified in **LRFD BDS C3.11.5.3 (degrees)**

Foundation Soil Design Parameters:

Drained Conditions (Effective Stress):

$\phi'_{fd} := 21 \text{ deg}$ Effective angle of internal friction

$\gamma_{fd} := 115 \frac{\text{lbf}}{\text{ft}^3}$ Unit weight

$c'_{fd} := 75 \frac{\text{lbf}}{\text{ft}^2}$ Effective Cohesion

$\delta_{fd} := 0.67 \cdot \phi'_{fd}$ $\delta_{fd} = 14.1 \text{ deg}$ Friction angle between foundation soils and footing taken as specified in **LRFD BDS C3.11.5.3 (degrees)**

Undrained Conditions (Total Stress):

$\phi_{fdu} := 0 \text{ deg}$ Angle of internal friction (Same as Drained Conditions if granular soils)

$\gamma_{fd} = 115 \frac{\text{lbf}}{\text{ft}^3}$ Unit weight

$Su_{fdu} := 650 \frac{\text{lbf}}{\text{ft}^2}$ Undrained Shear Strength

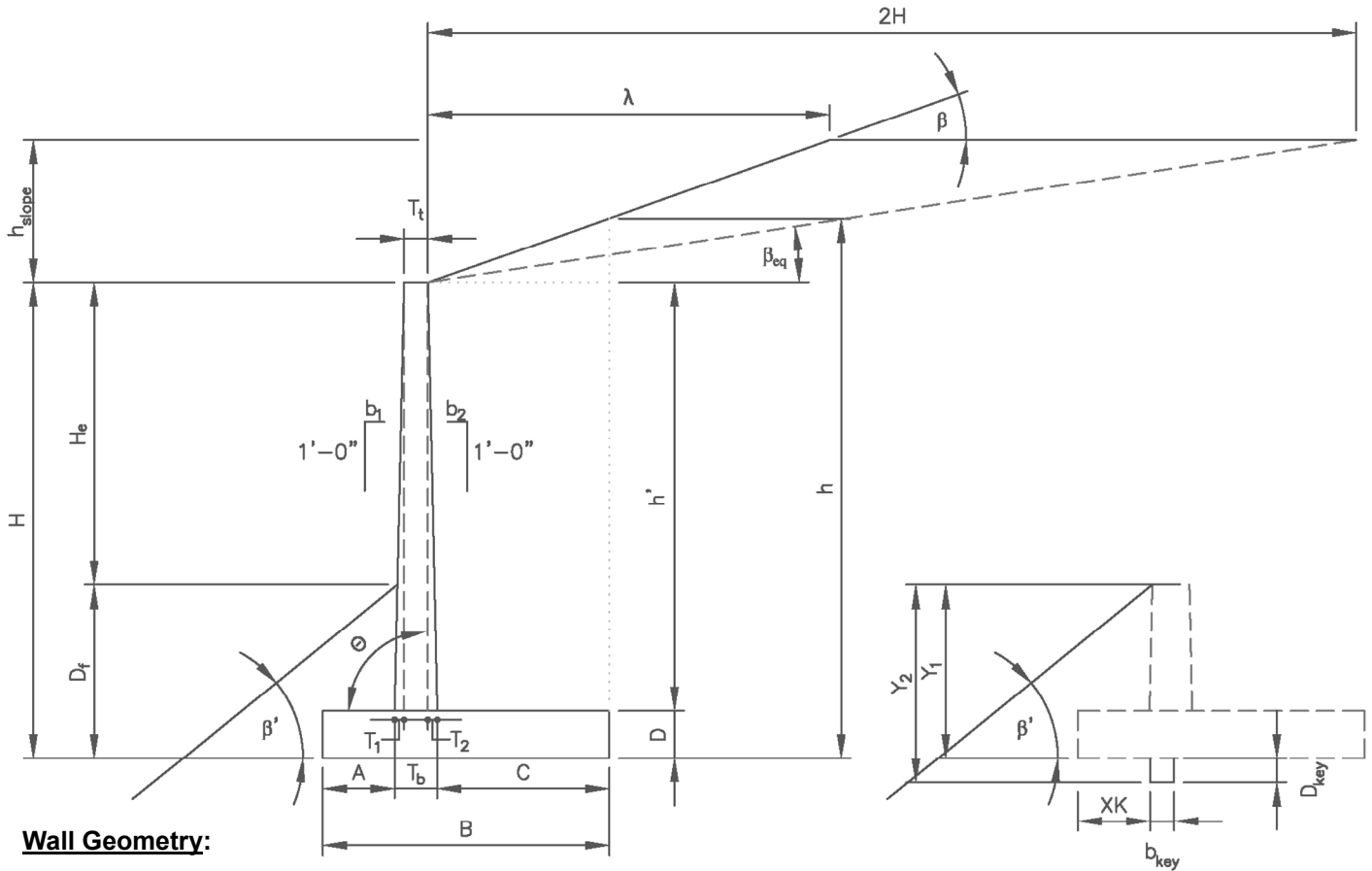
$\delta_{fdu} := 0.67 \cdot \phi_{fdu}$ $\delta_{fdu} = 0 \text{ deg}$ Friction angle between foundation soils and footing taken as specified in **LRFD BDS C3.11.5.3 (degrees)**

Foundation Surcharge Soil Parameters:

$\gamma_q := 120 \frac{\text{lbf}}{\text{ft}^3}$ Unit weight of Soil above bearing depth (Used in Bearing Resistance of Soil Calculation LRFD 10.6.3.1.2a-1)

Other Parameters:

$\gamma_c := 150 \frac{\text{lbf}}{\text{ft}^3}$ Concrete Unit weight



Wall Geometry:

$H_e := 6.42 \text{ ft}$

$D_f := 5.5 \text{ ft}$

$H := H_e + D_f \quad H = 11.9 \text{ ft}$

$T_t := 15 \text{ in}$

$b_1 := 0 \cdot \left(\frac{\text{in}}{\text{ft}}\right)$

$b_2 := 0 \cdot \left(\frac{\text{in}}{\text{ft}}\right)$

Preliminary Wall Dimensioning:

$B := 6.25 \text{ ft}$

$A := 4 \text{ ft}$

$D := 2.5 \text{ ft}$

Exposed wall height

Footing cover at Toe

Note: Where the potential for scour, erosion of undermining exists, spread footings shall be located to bear below the maximum depth of scour or undermining. Spread footings shall be located below the depth of potential frost. **LRFD BDS 10.6.1.2**

Design Wall Height

Stem thickness at top of wall

Frontwall batter, (b1H:12V)

Backwall batter, (b2H:12V)

Shear Key Dimensioning:

$$D_{key} := 1.5 \text{ ft}$$

$$b_{key} := 1.5 \text{ ft}$$

$$XK := 0 \text{ ft}$$

Depth of shear key from bottom of footing

Note: Footings on rock typically require shear key

Width of shear key

Distance from toe to shear key

Other Wall Dimensions:

$$h' := H - D$$

$$h' = 9.4 \text{ ft}$$

Stem height

$$T_1 := b_1 \cdot h'$$

$$T_1 = 0 \text{ ft}$$

Stem front batter width

$$T_2 := b_2 \cdot h'$$

$$T_2 = 0 \text{ ft}$$

Stem back batter width

$$T_b := T_1 + T_2 + T_t$$

$$T_b = 1.25 \text{ ft}$$

Stem thickness at bottom of wall

$$C := B - A - T_b$$

$$C = 1 \text{ ft}$$

Heel projection

$$\theta := 90 \text{ deg}$$

Angle of back face of wall to horizontal = $\text{atan}(12/b_2)$

$$b := 12 \text{ in}$$

$$b = 1 \text{ ft}$$

Concrete strip width (for design)

$$y_1 := 0 \text{ ft}$$

$$y_1 = 0 \text{ ft}$$

Depth to where passive pressure may begin to be utilized in front of wall.

$$y_2 := D_f + D_{key}$$

$$y_2 = 7 \text{ ft}$$

Bottom of shear key/footing depth i.e. depth to where passive pressure may no longer be utilized.

Site Grading and Slope Dimensions:

$$\beta := 26.565 \text{ deg}$$

Inclination of ground slope:

- Horizontal: 0
- 3H:1V: **18.435**
- 2H:1V: **26.565**
- 1.5H:1V: **33.690**

Inclination of ground slope behind face of wall.
Horizontal backfill behind CIP wall, $\beta = 0 \text{ deg}$

$$\beta' := 0 \text{ deg}$$

Inclination of ground slope in front of wall. If it is horizontal backfill in front of CIP wall, $\beta' = 0 \text{ deg}$. A negative angle (-) indicates grades slope up from front of wall. Positive angle (+) indicates grade slope down from wall as shown in above figure.

$$\lambda := 15 \text{ ft}$$

Horizontal distance from the back of the wall to point of slope crest .

$$L_{Traffic} := 15 \text{ ft}$$

Horizontal distance from assumed traffic surcharge load to Backface of Wall.

$$2 \cdot H = 23.8 \text{ ft}$$

IF λ IS GREATER THAN $2 \cdot H$ - USE INFINITE SLOPE CALCULATION SHEET

$$h_{slope} := \lambda \cdot \tan(\beta)$$

$$h_{slope} = 7.5 \text{ ft}$$

Height of broken slope behind wall

$$\beta_{eq} := \text{atan}\left(\frac{h_{slope}}{2 \cdot H}\right) = 17.5 \text{ deg}$$

Equivalent backslope angle

$$h := \text{if}(\lambda \leq T_2 + C, H + h_{slope}, H + (T_2 + C) \cdot \tan(\beta)) = 12.4 \text{ ft}$$

Height of retained fill at back of heel

Live Load Surcharge Parameters:

$$SUR := \text{if} \left(L_{\text{Traffic}} < \frac{H}{2}, 250 \frac{\text{lb}f}{\text{ft}^2}, 0 \frac{\text{lb}f}{\text{ft}^2} \right) = 0 \frac{\text{lb}f}{\text{ft}^2}$$

Live load surcharge (per LRFD BDS [3.11.6.4])

Note: A live load surcharge shall be applied where vehicular load is expected to act on the surface of the backfill within a distance equal to one-half the wall height behind the back face of the wall, see LRFD BDS Section 3.11.6.4 and Table 3.11.6.4-2 .

Calculations:

Earth Pressure Coefficients:

Backfill Active Earth:

$$\Gamma := \left(1 + \sqrt{\frac{(\sin(\phi'_{fd} + \delta) \cdot \sin(\phi'_{fd} - \beta_{eq}))}{(\sin(\theta - \delta) \cdot \sin(\theta + \beta_{eq}))}} \right)^2 \quad \Gamma = 2.048$$

$$k_{af} := \left(\frac{(\sin(\theta + \phi'_{fd}))^2}{(\Gamma \cdot (\sin(\theta))^2 \cdot \sin(\theta - \delta))} \right) \quad k_{af} = 0.39$$

Active Earth Pressure Coefficient
(per LRFD Sect. 3.11.5.3)

Foundation Soil Passive Earth:

Drained Conditions assuming ($\phi'_{fd} > 0$):

Input Parameters for LRFD Figure 3.11.5.4-2, assumes $\theta = 90$ degrees

$$\frac{-\beta'}{\phi'_{fd}} = 0$$

$$\frac{-\delta_{fd}}{\phi'_{fd}} = -0.67$$

$$k'_p := 3.25$$

Passive Earth Pressure Coefficient
from LRFD Figure 3.11.5.4-2

Determine Reduction Factor (R) by interpolation:

$$R_d := 0.921$$

Reduction Factor

$$k_{pd} := R_d \cdot k'_p$$

$$k_{pd} = 2.993$$

Passive Earth Pressure Coefficient for
Drained Conditions

Undrained Conditions ($\phi_{fdu} > 0$): **Note:** Expand window below to complete calculation

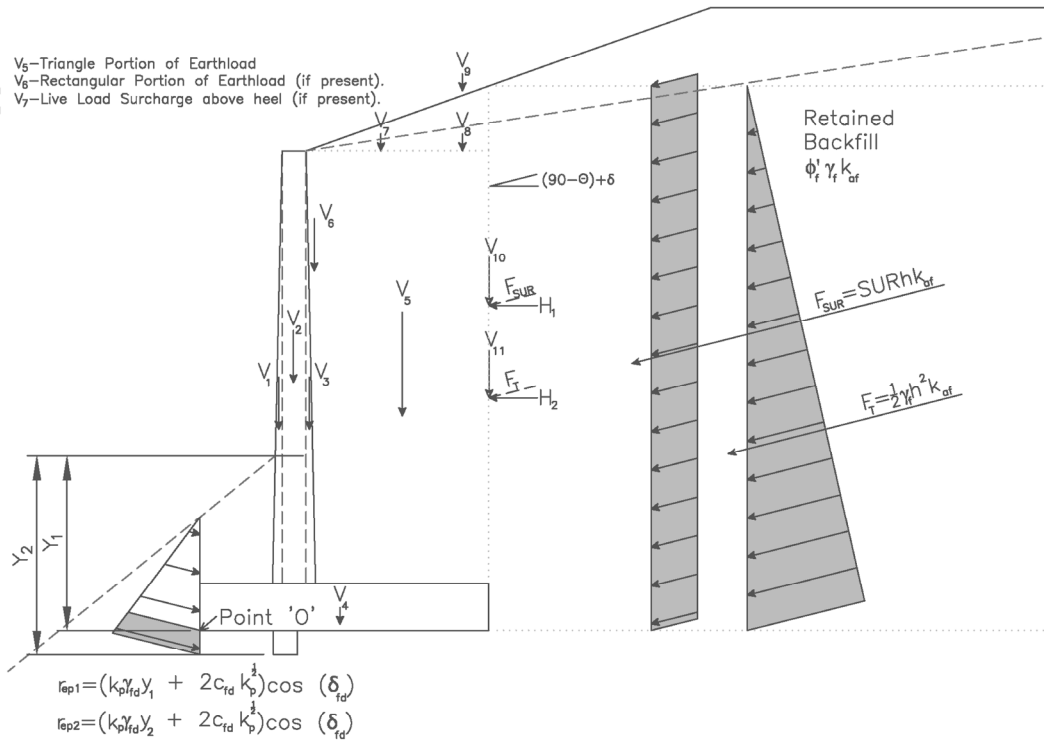
Undrained Conditions:

$$k_{pu} := \text{if}(\phi_{fdu} > 0, k_{pu}, 1)$$

$$k_{pu} = 1$$

Passive Earth Pressure Coefficient for
Resistance Undrained Conditions

Compute Unfactored Loads LRFD [Tables 3.4.1-1 and 3.4.1-2]:



$$F_T := \frac{1}{2} \cdot \gamma_f \cdot h^2 \cdot k_{af}$$

$$F_T = 3608.9 \frac{\text{lbf}}{\text{ft}}$$

Active Earth Force Resultant (EH)

$$F_{SUR} := SUR \cdot h \cdot k_{af}$$

$$F_{SUR} = 0 \frac{\text{lbf}}{\text{ft}}$$

Live Load Surcharge (LS)

Vertical Loads:

$$V_1 := \frac{1}{2} \cdot T_1 \cdot h' \cdot \gamma_c$$

$$V_1 = 0 \frac{\text{lbf}}{\text{ft}}$$

Wall stem front batter (DC)

$$V_2 := T_1 \cdot h' \cdot \gamma_c$$

$$V_2 = 1766.3 \frac{\text{lbf}}{\text{ft}}$$

Wall stem (DC)

$$V_3 := \frac{1}{2} \cdot T_2 \cdot h' \cdot \gamma_c$$

$$V_3 = 0 \frac{\text{lbf}}{\text{ft}}$$

Wall stem back batter (DC)

$$V_4 := D \cdot B \cdot \gamma_c$$

$$V_4 = 2343.8 \frac{\text{lbf}}{\text{ft}}$$

Wall Footing (DC)

$$V_5 := C \cdot h' \cdot \gamma_f$$

$$V_5 = 1130.4 \frac{\text{lbf}}{\text{ft}}$$

Soil Backfill - Heel (EV)

$$V_6 := \frac{1}{2} \cdot T_2 \cdot h' \cdot \gamma_f$$

$$V_6 = 0 \frac{\text{lbf}}{\text{ft}}$$

Soil Backfill - Batter (EV)

$$V_7 := \text{if} \left(\lambda \leq T_2 + C, \frac{1}{2} \cdot \lambda^2 \cdot \tan(\beta) \cdot \gamma_f, \frac{1}{2} \cdot (T_2 + C)^2 \cdot \tan(\beta) \cdot \gamma_f \right)$$

$$V_7 = 30 \frac{\text{lbf}}{\text{ft}}$$

Soil Backfill - Backslope
Triangle Portion (EV)

$$V_8 := \text{if} \left(\lambda \leq T_2 + C, (T_2 + C - \lambda) \cdot h_{slope} \cdot \gamma_f, 0 \cdot \frac{\text{lbf}}{\text{ft}} \right)$$

$$V_8 = 0 \frac{\text{lbf}}{\text{ft}}$$

Soil Backfill - Backslope
Rectangular Portion (EV)

$$V_9 := \text{if} \left(\lambda \leq T_2 + C, (T_2 + C - \lambda) \cdot SUR, 0 \cdot \frac{\text{lb}}{\text{ft}} \right)$$

$$V_9 = 0 \frac{\text{lb}}{\text{ft}}$$

Live Load Surcharge Above Heel - (LS)

$$V_{10} := F_{SUR} \cdot \sin(90 \cdot \text{deg} - \theta + \delta)$$

$$V_{10} = 0 \frac{\text{lb}}{\text{ft}}$$

Live Load Surcharge Resultant (vertical comp. - LS)

$$V_{11} := F_T \cdot \sin(90 \cdot \text{deg} - \theta + \delta)$$

$$V_{11} = 1240.2 \frac{\text{lb}}{\text{ft}}$$

Active earth force resultant (vertical component - EH)

Moment Arm:

Moments produced from vertical loads about Point 'O'

$$d_{v1} := A + \frac{2}{3} \cdot T_1 = 4 \text{ ft}$$

$$MV_1 := V_1 \cdot d_{v1} = 0 \text{ lbf}$$

$$d_{v2} := A + T_1 + \frac{T_1}{2} = 4.6 \text{ ft}$$

$$MV_2 := V_2 \cdot d_{v2} = 8168.9 \text{ lbf}$$

$$d_{v3} := A + T_1 + T_1 + \frac{T_2}{3} = 5.3 \text{ ft}$$

$$MV_3 := V_3 \cdot d_{v3} = 0 \text{ lbf}$$

$$d_{v4} := \frac{B}{2} = 3.1 \text{ ft}$$

$$MV_4 := V_4 \cdot d_{v4} = 7324.2 \text{ lbf}$$

$$d_{v5} := B - \frac{C}{2} = 5.8 \text{ ft}$$

$$MV_5 := V_5 \cdot d_{v5} = 6499.8 \text{ lbf}$$

$$d_{v6} := A + T_1 + T_1 + \frac{2 \cdot T_2}{3} = 5.3 \text{ ft}$$

$$MV_6 := V_6 \cdot d_{v6} = 0 \text{ lbf}$$

$$d_{v7} := \text{if} \left(\lambda \leq T_2 + C, A + T_1 + T_1 + \left(\frac{2}{3} (\lambda) \right), A + T_1 + T_1 + \left(\frac{2}{3} (T_2 + C) \right) \right) = 5.9 \text{ ft}$$

$$MV_7 := V_7 \cdot d_{v7} = 177.5 \text{ lbf}$$

$$d_{v8} := A + T_1 + T_1 + \lambda + \left(\frac{T_2 + C - \lambda}{2} \right) = 13.3 \text{ ft}$$

$$MV_8 := V_8 \cdot d_{v8} = 0 \text{ lbf}$$

$$d_{v9} := A + T_1 + T_1 + \lambda + \left(\frac{T_2 + C - \lambda}{2} \right) = 13.3 \text{ ft}$$

$$MV_9 := V_9 \cdot d_{v9} = 0 \text{ lbf}$$

$$d_{v10} := B = 6.3 \text{ ft}$$

$$MV_{10} := V_{10} \cdot d_{v10} = 0 \text{ lbf}$$

$$d_{v11} := B = 6.3 \text{ ft}$$

$$MV_{11} := V_{11} \cdot d_{v11} = 7751.5 \text{ lbf}$$

Horizontal Loads:

$$H_1 := F_{SUR} \cdot \cos(90 \cdot \text{deg} - \theta + \delta)$$

$$H_1 = 0 \frac{\text{lb}}{\text{ft}}$$

Live Load Surcharge Resultant (horizontal comp. - LS)

$$H_2 := F_T \cdot \cos(90 \cdot \text{deg} - \theta + \delta)$$

$$H_2 = 3389.1 \frac{\text{lb}}{\text{ft}}$$

Active Earth Force Resultant (horizontal comp. - EH)

Moment Arm:

$$d_{h1} := \frac{h}{2}$$

$$d_{h1} = 6.2 \text{ ft}$$

$$MH_1 := H_1 \cdot d_{h1}$$

$$MH_1 = 0 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$d_{h2} := \frac{h}{3}$$

$$d_{h2} = 4.1 \text{ ft}$$

$$MH_2 := H_2 \cdot d_{h2}$$

$$MH_2 = 14030.9 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

Moment:

Unfactored Loads by Load Type:

$$V_{DC} := V_1 + V_2 + V_3 + V_4 \quad V_{DC} = 4110 \frac{\text{lb}}{\text{ft}} \quad V_{EV} := V_5 + V_6 + V_7 + V_8 \quad V_{EV} = 1160.4 \frac{\text{lb}}{\text{ft}}$$

$$V_{LS_Ia} := V_{10} \quad V_{LS_Ia} = 0 \frac{\text{lb}}{\text{ft}} \quad V_{LS_Ib} := V_9 + V_{10} \quad V_{LS_Ia} = 0 \frac{\text{lb}}{\text{ft}}$$

$$V_{EH} := V_{11} \quad V_{EH} = 1240.2 \frac{\text{lb}}{\text{ft}}$$

$$H_{EH} := H_2 \quad H_{EH} = 3389.1 \frac{\text{lb}}{\text{ft}} \quad H_{LS} := H_1 \quad H_{LS} = 0 \frac{\text{lb}}{\text{ft}}$$

Unfactored Moments by Load Type

$$M_{DC} := MV_1 + MV_2 + MV_3 + MV_4 \quad M_{DC} = 15493.1 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{EV} := MV_5 + MV_6 + MV_7 + MV_8 \quad M_{EV} = 6677.3 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{LSV_Ia} := MV_{10} \quad M_{LSV_Ia} = 0 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{LSV_Ib} := MV_9 + MV_{10} \quad M_{LSV_Ib} = 0 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{EH1} := MV_{11} \quad M_{EH1} = 7751.5 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{LSH} := MH_1 \quad M_{LSH} = 0 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

$$M_{EH2} := MH_2 \quad M_{EH2} = 14030.9 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

Load Combination Limit States:

$\eta := 1$ LRFD Load Modifier

Strength Limit State I: EV(min) = 1.00 EV(max) = 1.35
EH(min) = 0.90 EH(max) = 1.50
LS = 1.75

Strength Limit State Ia: (Sliding and Eccentricity)	$Ia_{DC} := 0.9$	$Ia_{EV} := 1$	$Ia_{EH} := 1.5$	$Ia_{LS} := 1.75$
Strength Limit State Ib: (Bearing Capacity)	$Ib_{DC} := 1.25$	$Ib_{EV} := 1.35$	$Ib_{EH} := 1.5$	$Ib_{LS} := 1.75$

Factored Vertical Loads by Limit State:

$$V_{Ia} := \eta \cdot ((Ia_{DC} \cdot V_{DC}) + (Ia_{EV} \cdot V_{EV}) + (Ia_{EH} \cdot V_{EH}) + (Ia_{LS} \cdot V_{LS_Ia})) \quad V_{Ia} = 6719.8 \frac{\text{lbf}}{\text{ft}}$$

$$V_{Ib} := \eta \cdot ((Ib_{DC} \cdot V_{DC}) + (Ib_{EV} \cdot V_{EV}) + (Ib_{EH} \cdot V_{EH}) + (Ib_{LS} \cdot V_{LS_Ib})) \quad V_{Ib} = 8564.4 \frac{\text{lbf}}{\text{ft}}$$

Factored Horizontal Loads by Limit State:

$$H_{Ia} := \eta \cdot ((Ia_{LS} \cdot H_{LS}) + (Ia_{EH} \cdot H_{EH})) \quad H_{Ia} = 5083.7 \frac{\text{lbf}}{\text{ft}}$$

$$H_{Ib} := \eta \cdot ((Ib_{LS} \cdot H_{LS}) + (Ib_{EH} \cdot H_{EH})) \quad H_{Ib} = 5083.7 \frac{\text{lbf}}{\text{ft}}$$

Factored Moments Produced by Vertical Loads by Limit State:

$$MV_{Ia} := \eta \cdot ((Ia_{DC} \cdot M_{DC}) + (Ia_{EV} \cdot M_{EV}) + (Ia_{EH} \cdot M_{EH1}) + (Ia_{LS} \cdot M_{LSV_Ia})) \quad MV_{Ia} = 32248.3 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

$$MV_{Ib} := \eta \cdot ((Ib_{DC} \cdot M_{DC}) + (Ib_{EV} \cdot M_{EV}) + (Ib_{EH} \cdot M_{EH1}) + (Ib_{LS} \cdot M_{LSV_Ib})) \quad MV_{Ib} = 40008 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

Factored Moments Produced by Horizontal Loads by Limit State:

$$MH_{Ia} := \eta \cdot ((Ia_{LS} \cdot M_{LSH}) + (Ia_{EH} \cdot M_{EH2})) \quad MH_{Ia} = 21046.3 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

$$MH_{Ib} := \eta \cdot ((Ib_{LS} \cdot M_{LSH}) + (Ib_{EH} \cdot M_{EH2})) \quad MH_{Ib} = 21046.3 \frac{\text{lbf} \cdot \text{ft}}{\text{ft}}$$

Compute Bearing Resistance:

Compute the resultant location about the toe of the base length (distance from "O") Strength lb:

$\Sigma M_R := MV_{lb}$	$\Sigma M_R = 40008 \frac{\text{lb}\cdot\text{ft}}{\text{ft}}$	Sum of Resisting Moments (Strength lb)
$\Sigma M_O := MH_{lb}$	$\Sigma M_O = 21046.3 \frac{\text{lb}\cdot\text{ft}}{\text{ft}}$	Sum of Overturning Moments (Strength lb)
$\Sigma V := V_{lb}$	$\Sigma V = 8564.4 \frac{\text{lb}}{\text{ft}}$	Sum of Vertical Loads (Strength lb)
$x := \frac{(\Sigma M_R - \Sigma M_O)}{\Sigma V}$	$x = 2.2 \text{ ft}$	Distance from Point "O" the resultant intersects the base

$e := \left| \frac{B}{2} - x \right|$ $e = 0.91 \text{ ft}$

Wall eccentricity, **Note:** The vertical stress is assumed to be uniformly distributed over the effective bearing width, B', since the wall is supported by a soil foundation **LRFD [11.6.3.2]**. The effective bearing width is equal to B-2e.

Foundation Layout:

$B' := B - 2 \cdot e$	$B' = 4.4 \text{ ft}$	Effective Footing Width
$L' := 67.5 \text{ ft}$		Effective Footing Length (Assumed)
$H' := H_{lb}$	$H' = 5083.7 \frac{\text{lb}}{\text{ft}}$	Summation of Horizontal Loads (Strength lb)
$V' := V_{lb}$	$V' = 8564.4 \frac{\text{lb}}{\text{ft}}$	Summation of Vertical Loads (Strength lb)
$D_f = 5.5 \text{ ft}$		Footing embedment
$d_w := 0 \text{ ft}$		Depth of Groundwater below ground surface at front of wall.

Drained Conditions (Effective Stress):

$N_q := \text{if} \left(\phi'_{fd} > 0, e^{\pi \cdot \tan(\phi'_{fd})} \cdot \tan \left(45 \text{ deg} + \frac{\phi'_{fd}}{2} \right), 1.0 \right)$	$N_q = 7.07$
$N_c := \text{if} \left(\phi'_{fd} > 0, \frac{N_q - 1}{\tan(\phi'_{fd})}, 5.14 \right)$	$N_c = 15.81$
$N_y := 2 \cdot (N_q + 1) \cdot \tan(\phi'_{fd})$	$N_y = 6.2$

Compute shape correction factors per LRFD [Table 10.6.3.1.2a-3]:

$s_c := \text{if} \left(\phi'_{fd} > 0, 1 + \left(\frac{B'}{L'} \right) \cdot \left(\frac{N_q}{N_c} \right), 1 + \left(\frac{B'}{5 \cdot L'} \right) \right)$	$s_c = 1.029$
$s_q := \text{if} \left(\phi'_{fd} > 0, 1 + \left(\frac{B'}{L'} \right) \cdot \tan(\phi'_{fd}), 1 \right)$	$s_q = 1.025$
$s_y := \text{if} \left(\phi'_{fd} > 0, 1 - 0.4 \cdot \left(\frac{B'}{L'} \right), 1 \right)$	$s_y = 0.974$

Load inclination factors:

$$i_q := 1$$

$$i_\gamma := 1$$

$$i_c := 1$$

Assumed to be 1.0, see **LRFD BDS C10.6.3.1.2a**.
"Most geotechnical engineers do not used the load inclination factors". If desired, use LRFD Equations [10.6.3.1.2a-5] thru [10.6.3.1.2a-9].

Compute groundwater depth correction factors per LRFD [Table 10.6.3.1.2a-2]:

$$C_{wq} := \text{if}(d_w \geq D_f, 1.0, 0.5) \quad C_{wq} = 0.5$$

$$C_{w\gamma} := \text{if}(d_w \geq (1.5 \cdot B) + D_f, 1.0, 0.5) \quad C_{w\gamma} = 0.5$$

Depth Correction Factor per Hanson (1970):

$$d_q := 1 + 2 \cdot \tan(\phi'_{fd}) \cdot (1 - \sin(\phi'_{fd}))^2 \cdot \text{atan}\left(\frac{D_f}{B'}\right)$$

$$d_q = 1.28$$

Compute modified bearing capacity factors LRFD [Equation 10.6.3.1.2a-2 to 10.6.3.1.2a-4]:

$$N_{cm} := N_c \cdot s_c \cdot i_c \quad N_{cm} = 16.279$$

$$N_{qm} := N_q \cdot s_q \cdot d_q \cdot i_q \quad N_{qm} = 9.295$$

$$N_{\gamma m} := N_\gamma \cdot s_\gamma \cdot i_\gamma \quad N_{\gamma m} = 6.034$$

Compute nominal bearing resistance, LRFD [Eq 10.6.3.1.2a-1]:

$$q_{nd} := c'_{fd} \cdot N_{cm} + \gamma_q \cdot D_f \cdot N_{qm} \cdot C_{wq} + 0.5 \cdot \gamma_{fd} \cdot B' \cdot N_{\gamma m} \cdot C_{w\gamma} \quad q_{nd} = 5056.3 \frac{\text{lb}}{\text{ft}^2}$$

Compute factored bearing resistance, LRFD [Eq 10.6.3.1.1]:

$$\phi_b := .55$$

Bearing resistance factor LRFD Table 11.5.7-1.

$$q_{Rd} := \phi_b \cdot q_{nd} \quad q_{Rd} = 2.8 \text{ ksf}$$

Factored bearing resistance Drained Conditions

Undrained Conditions (Effective Stress):

$$N_q := \text{if}\left(\phi_{fdu} > 0, e^{\pi \cdot \tan(\phi_{fdu})} \cdot \tan\left(45 \text{ deg} + \frac{\phi_{fdu}}{2}\right), 1.0\right) \quad N_q = 1$$

$$N_c := \text{if}\left(\phi_{fdu} > 0, \frac{N_q - 1}{\tan(\phi_{fdu})}, 5.14\right) \quad N_c = 5.14$$

$$N_\gamma := 2 \cdot (N_q + 1) \cdot \tan(\phi_{fdu}) \quad N_\gamma = 0$$

Compute shape correction factors per LRFD [Table 10.6.3.1.2a-3]:

$$s_c := \text{if} \left(\phi_{fd} > 0, 1 + \left(\frac{B'}{L'} \right) \cdot \left(\frac{N_q}{N_c} \right), 1 + \left(\frac{B'}{5 \cdot L'} \right) \right) \quad s_c = 1.013$$

$$s_q := \text{if} \left(\phi_{fd} > 0, 1 + \left(\frac{B'}{L'} \right) \cdot \tan(\phi_{fd}), 1 \right) \quad s_q = 1$$

$$s_\gamma := \text{if} \left(\phi_{fd} > 0, 1 - 0.4 \cdot \left(\frac{B'}{L'} \right), 1 \right) \quad s_\gamma = 1$$

Load inclination factors:

$$i_q := 1$$

$$i_\gamma := 1$$

$$i_c := 1$$

Assumed to be 1.0, see LRFD BDS C10.6.3.1.2a. "Most geotechnical engineers do not used the load inclination factors". If desired, use LRFD Equations [10.6.3.1.2a-5] thru [10.6.3.1.2a-9].

Depth Correction Factor per Hanson (1970):

$$d_q := 1 + 2 \cdot \tan(\phi'_{fd}) \cdot (1 - \sin(\phi'_{fd}))^2 \cdot \text{atan} \left(\frac{D_f}{B'} \right)$$

$$d_q = 1.28$$

Compute modified bearing capacity factors LRFD [Equation 10.6.3.1.2a-2 to 10.6.3.1.2a-4]:

$$N_{cm} := N_c \cdot s_c \cdot i_c \quad N_{cm} = 5.207$$

$$N_{qm} := N_q \cdot s_q \cdot d_q \cdot i_q \quad N_{qm} = 1.282$$

$$N_{\gamma m} := N_\gamma \cdot s_\gamma \cdot i_\gamma \quad N_{\gamma m} = 0$$

Compute nominal bearing resistance. LRFD [Eq 10.6.3.1.2a-1]:

$$q_{nu} := S_{u_{fd}} \cdot N_{cm} + \gamma_q \cdot D_f \cdot N_{qm} \cdot C_{wq} + 0.5 \cdot \gamma_{fd} \cdot B' \cdot N_{\gamma m} \cdot C_{w\gamma} \quad q_{nu} = 3808 \frac{\text{lbf}}{\text{ft}^2}$$

Compute factored bearing resistance. LRFD [Eq 10.6.3.1.1]:

$$\phi_b := .55$$

$$q_{Ru} := \phi_b \cdot q_{nu} \quad q_{Ru} = 2.1 \text{ ksf}$$

Bearing resistance factor LRFD Table 11.5.7-1.

Factored bearing resistance Undrained Conditions

Factored Bearing Resistance Drained vs. Undrained Conditions:

Drained Conditions: $q_{Rd} = 2.8 \text{ ksf}$

Undrained Conditions: $q_{Ru} = 2.1 \text{ ksf}$

Evaluate External Stability of Wall:

Compute the factored bearing stress :

$$e = 0.91 \text{ ft}$$

$$\sigma_V := \frac{\Sigma V}{B - 2 \cdot e} \quad \sigma_V = 1.934 \text{ ksf}$$

Bearing Capacity:Demand Ratio (CDR)

Drained Conditions: $CDR_{Bearing_D} := \frac{q_{Rd}}{\sigma_V}$ Is the CDR > or = to 1.0? $CDR_{Bearing_D} = 1.44$

Undrained Conditions: $CDR_{Bearing_U} := \frac{q_{Ru}}{\sigma_V}$ Is the CDR > or = to 1.0? $CDR_{Bearing_U} = 1.08$

Limiting Eccentricity at Base of Wall (Strength Ia):

Compute the resultant location about the toe "O" of the base length (distance from Pivot):

$$e_{max} := \frac{B}{3}$$

$$e_{max} = 2.1 \text{ ft}$$

Maximum Eccentricity **LRFD [C11.6.3.3.]**
Equals B/3 for soil.

$$\Sigma M_R := MV_{Ia}$$

$$\Sigma M_R = 32248.3 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

Sum of Resisting Moments (Strength Ia)

$$\Sigma M_O := MH_{Ia}$$

$$\Sigma M_O = 21046.3 \frac{\text{lb} \cdot \text{ft}}{\text{ft}}$$

Sum of Overturning Moments (Strength Ia)

$$\Sigma V := V_{Ia}$$

$$\Sigma V = 6719.8 \frac{\text{lb}}{\text{ft}}$$

Sum of Vertical Loads (Strength Ia)

$$x := \frac{(\Sigma M_R - \Sigma M_O)}{\Sigma V}$$

$$x = 1.7 \text{ ft}$$

Distance from Point "O" the resultant intersects the base

$$e := \left| \frac{B}{2} - x \right|$$

$$e = 1.46 \text{ ft}$$

Wall eccentricity, **Note:** The vertical stress is assumed to be uniformly distributed over the effective bearing width, B', since the wall is supported by a soil foundation **LRFD [11.6.3.2]**. The effective bearing width is equal to B-2e. .

Eccentricity Capacity:Demand Ratio (CDR)

$$CDR_{Eccentricity} := \frac{e_{max}}{e}$$

Is the CDR > or = to 1.0?

$$CDR_{Eccentricity} = 1.43$$

Sliding Resistance at Base of Wall LRFD [10.6.3.4]:

Factored Sliding Force (Strength Ia):

$$R_u := H_{Ia} \qquad R_u = 5083.7 \frac{\text{lb}}{\text{ft}}$$

Drained Conditions (Effective Stress):

Compute passive resistance throughout the design life of the wall LRFD [Eq 3.11.5.4-1]:

$$r_{ep1} := \left(k_{pd} \cdot \gamma_{fd} \cdot y_1 + 2 \cdot c'_{fd} \cdot \sqrt{k_{pd}} \right) \cdot \cos(\delta_{fd}) \qquad \text{Nominal passive pressure at } y_1$$

$$r_{ep2} := \left(k_{pd} \cdot \gamma_{fd} \cdot y_2 + 2 \cdot c'_{fd} \cdot \sqrt{k_{pd}} \right) \cdot \cos(\delta_{fd}) \qquad \text{Nominal passive pressure at } y_2$$

$$R_{ep} := \frac{r_{ep1} + r_{ep2}}{2} \cdot (y_2 - y_1) \qquad R_{ep} = 9942.6 \frac{\text{lb}}{\text{ft}} \qquad \text{Nominal passive resistance Drained Conditions}$$

416 Note: Passive Resistance shall be neglected in stability computations, unless the base of the wall extends below the depth of maximum scour, freeze-thaw or other disturbances. In the latter case, only the embedment below the greater of these depths shall be considered effective LRFD [11.6.3.5].

Compute sliding resistance between soil and foundation:

$$c := 1.0 \qquad c = 1.0 \text{ for Cast-in-Place} \\ c = 0.8 \text{ for Precast}$$

$$\Sigma V := V_{Ia} \qquad \Sigma V = 6719.8 \frac{\text{lb}}{\text{ft}} \qquad \text{Sum of Vertical Loads (Strength Ia)}$$

$$R_\tau := c \cdot \Sigma V \cdot \tan(\phi'_{fd}) \qquad R_\tau = 2579.5 \frac{\text{lb}}{\text{ft}} \qquad \text{Nominal sliding resistance Cohesionless Soils}$$

Compute factored resistance against failure by sliding LRFD [10.6.3.4]:

$$\phi_{ep} := 0.5$$

Resistance factor for passive resistance specified in LRFD Table 10.5.5.2.2-1

$$\phi_\tau := 1.0$$

Resistance factor for sliding resistance specified in LRFD Table 11.5.7-1.

$$\phi R_n := \phi_\tau \cdot R_\tau + \phi_{ep} \cdot R_{ep} \qquad R_R := \phi R_n$$

Factored Sliding Resistance to be used in CDR Calculations:

$$R_R = 7550.761 \frac{\text{lb}}{\text{ft}}$$

Sliding Capacity:Demand Ratio (CDR)

$$CDR_{Sliding} := \frac{R_R}{R_u} \qquad \text{Is the CDR } \geq \text{ or } = \text{ to } 1.0?$$

$$CDR_{Sliding} = 1.49$$

Undrained Conditions (Total Stress):

Compute passive resistance throughout the design life of the wall LRFD [Eq 3.11.5.4-1]:

$r_{ep1} := (k_{pu} \cdot \gamma_{fd} \cdot y_1 + 2 \cdot Su_{fd} \cdot \sqrt{k_{pu}}) \cdot \cos(\delta_{fd})$	Nominal passive pressure at y1
$r_{ep2} := (k_{pu} \cdot \gamma_{fd} \cdot y_2 + 2 \cdot Su_{fd} \cdot \sqrt{k_{pu}}) \cdot \cos(\delta_{fd})$	Nominal passive pressure at y2
$R_{ep} := \frac{r_{ep1} + r_{ep2}}{2} \cdot (y_2 - y_1)$	Nominal passive resistance Drained Conditions
$R_{ep} = 11560 \frac{lbf}{ft}$	

416 Note: Passive Resistance shall be neglected in stability computations, unless the base of the wall extends below the depth of maximum scour, freeze-thaw or other disturbances. In the latter case, only the embedment below the greater of these depths shall be considered effective LRFD [11.6.3.5].

Compute sliding resistance between soil and foundation:

$c := 1.0$	$c = 1.0$ for Cast-in-Place $c = 0.8$ for Precast
$\Sigma V := V_{Ia}$	$\Sigma V = 6719.8 \frac{lbf}{ft}$ Sum of Vertical Loads (Strength Ia)
$e = 1.46 \text{ ft}$	Wall eccentricity, Calculated in above <u>Limiting Eccentricity at Base of Wall (Strength Ia) Section.</u>
$B = 6.3 \text{ ft}$	Footing base width
$\frac{B}{6} = 1 \text{ ft}$	If $e < B/6$ the resultant is in the middle one-third
$\sigma_{vmax} := \frac{\Sigma V}{B} \cdot \left(1 + 6 \cdot \frac{e}{B}\right)$	$\sigma_{vmax} = 2580 \frac{lbf}{ft^2}$ Max vertical stress (if resultant is in the middle one-third of base) LRFD [11.6.3.2-2].
$\sigma_{vmin} := \frac{\Sigma V}{B} \cdot \left(1 - 6 \cdot \frac{e}{B}\right)$	$\sigma_{vmin} = -429.7 \frac{lbf}{ft^2}$ Max vertical stress (if resultant is in the middle one-third of base) LRFD [11.6.3.2-2].
$q_{max} := \frac{1}{2} \cdot \sigma_{vmax}$	$q_{max} = 1290 \frac{lbf}{ft^2}$ Max unit shear resistance as 1/2 max vertical stress LRFD [10.6.3.4].
$q_{min} := \frac{1}{2} \cdot \sigma_{vmin}$	$q_{min} = -214.8 \frac{lbf}{ft^2}$ Minimum unit shear resistance as 1/2 minimum vertical stress LRFD [10.6.3.4].

Determine which Cohesive Soil Resistance Case is Present:

$Case_1 := \text{if}(q_{max} > Su_{fd} > q_{min} \geq 0, 1, 0)$	$Case_1 = 0$
$Case_2 := \text{if}(Su_{fd} > q_{max} > q_{min} \geq 0, 1, 0)$	$Case_2 = 0$
$Case_3 := \text{if}(q_{max} > q_{min} > Su_{fd}, 1, 0)$	$Case_3 = 0$
$Case_4 := \text{if}(q_{min} < 0, \text{if}(Su_{fd} < q_{max}, 1, 0), 0)$	$Case_4 = 1$
$Case_5 := \text{if}(q_{min} < 0, \text{if}(Su_{fd} > q_{max}, 1, 0), 0)$	$Case_5 = 0$

Unit Shear Resistance for Case 1:

$$S_1 := Su_{fd_u} - q_{min} = 864.8 \frac{\text{lb}}{\text{ft}^2}$$

$$B_1 := \frac{B \cdot (Su_{fd_u} - q_{min})}{q_{max} - q_{min}} = 3.6 \text{ ft}$$

$$B_3 := B = 6.3 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B_1 = 1553.2 \frac{\text{lb}}{\text{ft}}$$

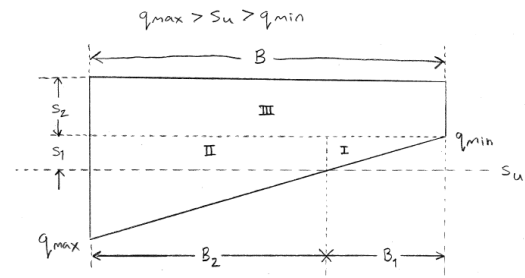
$$III := S_2 \cdot B_3 = -1342.8 \frac{\text{lb}}{\text{ft}}$$

$$R_{\tau_{case1}} := I + II + III = 2509.3 \frac{\text{lb}}{\text{ft}}$$

$$S_2 := q_{min} = -214.8 \frac{\text{lb}}{\text{ft}^2}$$

$$B_2 := \frac{B \cdot (q_{max} - Su_{fd_u})}{q_{max} - q_{min}} = 2.7 \text{ ft}$$

$$II := S_1 \cdot B_2 = 2298.8 \frac{\text{lb}}{\text{ft}}$$



Unit Shear Resistance for Case 2:

$$S_1 := q_{max} - q_{min} = 1504.9 \frac{\text{lb}}{\text{ft}^2}$$

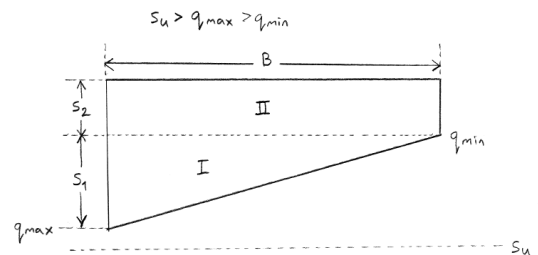
$$B = 6.3 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B = 4702.7 \frac{\text{lb}}{\text{ft}}$$

$$R_{\tau_{case2}} := I + II = 3359.9 \frac{\text{lb}}{\text{ft}}$$

$$S_2 := q_{min} = -214.8 \frac{\text{lb}}{\text{ft}^2}$$

$$II := S_2 \cdot B = -1342.8 \frac{\text{lb}}{\text{ft}}$$



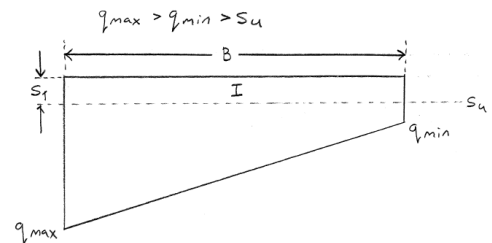
Unit Shear Resistance for Case 3:

$$S_1 := Su_{fd_u} = 650 \frac{\text{lb}}{\text{ft}^2}$$

$$B = 6.3 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B = 2031.3 \frac{\text{lb}}{\text{ft}}$$

$$R_{\tau_{case3}} := I = 2031.3 \frac{\text{lb}}{\text{ft}}$$



Unit Shear Resistance for Case 4:

$$S_1 := Su_{fd_u} = 650 \frac{\text{lb}}{\text{ft}^2}$$

$$B_3 := \frac{B \cdot (-q_{min})}{q_{max} - q_{min}} = 0.9 \text{ ft}$$

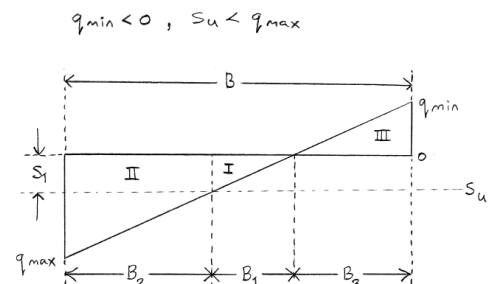
$$B_2 := B - (B_1 + B_3) = 2.7 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B_1 = 877.4 \frac{\text{lb}}{\text{ft}}$$

$$R_{\tau_{case4}} := I + II = 2605.1 \frac{\text{lb}}{\text{ft}}$$

$$B_1 := \left(\frac{Su_{fd_u}}{q_{max}} \right) \cdot (B - B_3) = 2.7 \text{ ft}$$

$$II := S_1 \cdot B_2 = 1727.8 \frac{\text{lb}}{\text{ft}}$$



Unit Shear Resistance for Case 5:

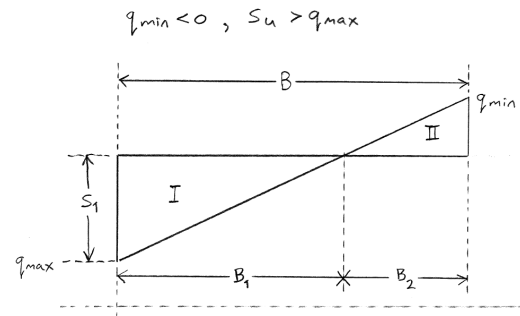
$$S_1 := q_{max} = 1290 \frac{lb}{ft^2}$$

$$B_1 := \frac{B \cdot q_{max}}{q_{max} - q_{min}} = 5.4 \text{ ft}$$

$$B_2 := B - B_1 = 0.9 \text{ ft}$$

$$I := \frac{1}{2} \cdot S_1 \cdot B_1 = 3455.7 \frac{lb}{ft}$$

$$R_{\tau_case5} := I = 3455.7 \frac{lb}{ft}$$



Define the Applicable Case:

$$R_{\tau} := R_{\tau_case4}$$

$$R_{\tau} = 2605.1 \frac{lb}{ft}$$

Nominal sliding resistance Cohesive Soils

Compute factored resistance against failure by sliding **LRFD [10.6.3.4]:**

$$\phi_{ep} := 0.5$$

Resistance factor for passive resistance specified in **LRFD Table 10.5.5.2.2-1**

$$\phi_{\tau} := 1.0$$

Resistance factor for sliding resistance specified in **LRFD Table 11.5.7-1.**

$$\phi R_n := \phi_{\tau} \cdot R_{\tau} + \phi_{ep} \cdot R_{ep}$$

$$R_R := \phi R_n$$

Factored Sliding Resistance to be used in CDR Calculations: $R_R = 8385.115 \frac{lb}{ft}$

Sliding Capacity: Demand Ratio (CDR)

$$CDR_{Sliding} := \frac{R_R}{R_u}$$

Is the CDR > or = to 1.0?

$$CDR_{Sliding} = 1.65$$