

BOARD OF COUNTY COMMISSIONERS WARREN COUNTY, OHIO

406 Justice Drive, Lebanon, Ohio 45036 www.co.warren.oh.us commissioners@co.warren.oh.us

Telephone (513) 695-1250 Facsimile (513) 695-2054

TOM GROSSMANN SHANNON JONES DAVID G. YOUNG

ENTER INTO CONTRACT WITH MOODY'S OF DAYTON, INC. FOR THE 2019 WELL REDEVELOPMENT PROJECT

WHEREAS, pursuant to Resolution 19-1595, adopted November 26, 2019 this Board approved a Notice of Intent to Award Bid for the 2019 Well Redevelopment Project to Moody's of Dayton, Inc., for a total bid price of \$318,827.00; and

WHEREAS, all documentation, including performance bonds, insurance certificates, etc., has been submitted by the contractor; and

NOW THEREFORE BE IT RESOLVED, to enter into contract with Moody's of Dayton, Inc., 4359 Infirmary Rd., Miamisburg, Ohio 45342, for a total contract price of \$318,827.00; as attached hereto and made a part hereof.

Mrs. Jones moved for adoption of the foregoing resolution being seconded by Mr. Young. Upon call of the roll, the following vote resulted:

Mr. Grossmann – yea Mr. Young – yea Mrs. Jones – yea

Resolution adopted this 7th day of January 2020.

	BOARD OF COUNTY COMMISSIONERS
	Tina Osborne, Clerk
lkl\	

cc: c/a—Moody's of Dayton, Inc. Water/Sewer (file) OMB Bid file



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Telephone (513) 695-1250 Facsimile (513) 695-2054 TOM GROSSMANN SHANNON JONES DAVID G. YOUNG

APPROVE NOTICE OF INTENT TO AWARD BID TO MOODY'S OF DAYTON, INC. FOR 2019 WELL REDEVELOPMENT PROJECT

WHEREAS, bids were closed at 11:00 a.m., on November 7, 2019, and the bids received were opened and read aloud for the 2019 Well Redevelopment Project, and the results are on file in the Commissioner's Office; and

WHEREAS, upon review of such bids by Kathryn Gilbert, Water and Sewer Staff Engineer, Moody's of Dayton, Inc. has been determined to be the best bidder; and

NOW THEREFORE BE IT RESOLVED, upon recommendation of the Warren County Sanitary Engineer, that it is the intent of this Board to award the contract to Moody's of Dayton, Inc. for a total bid price of \$318,827.00; and

BE IT FURTHER RESOLVED, that the President of the Board is hereby authorized to execute a "Notice of Intent to Award."

Mr. Grossmann moved for adoption of the foregoing resolution being seconded by Mr. Young. Upon call of the roll, the following vote resulted:

Mrs. Jones – yea Mr. Young – yea Mr. Grossmann – yea

Resolution adopted this 26th day of November 2019.

tesoration adopted this 20	day of 140 verificer 2019.	
	BOARD OF COUNTY COMMISSIONERS	
	Tina Osborne, Clerk	

 $KH\setminus$

cc: Water/Sewer (file)
OMB Bid file



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Telephone (513) 695-1250 Facsimile (513) 695-2054 TOM GROSSMANN SHANNON JONES DAVID G. YOUNG

BID OPENING

November 7, 2019

BID OPENING – 2019 Well Redevelopment Project

Bids were closed at 11:00 a.m. this 7th day of November and the following bids were received, opened and read aloud for the 2019 Well Redevelopment Project for the Warren County Water and Sewer Department:

National Water Services \$280,000.00

Moody's of Dayton, Inc. \$318,827.00

Layne Construction \$425,200.00

Kathryn Gilbert, Staff Engineer, will review bids for a recommendation at a later date.

cc: Bid File OMB W/S (file)

ADDENDUM #3

2019 WELL REDEVELOPMENT PROJECT

5 PAGES TOTAL

This Addendum No. 3 is issued to make certain revisions, additions, and clarifications to the original Contract Documents and shall be incorporated into the original Specifications. This Addendum takes precedence over any and all information previously issued. No other revisions to the Specifications are to be inferred.

BID/CONTRACT DOCUMENTS:

1) Section 00040 – INVITATION TO BIDDERS, Page 1, **Delete** the words:

"The estimated contract value is \$275.000.00"

and **Replace** with the following:

"The estimated contract value is \$300,000.00."

- 2) Section 00100 BID PROPOSAL, Page 3, **Delete** the Base Bid Form added as part of Addendum #2 and **Add** the enclosed Base Bid Form.
- 3) Section 00200 GENERAL INSTRUCTIONS TO BIDDERS, Page 11, Paragraph 49, Delete the words:

"The Engineer's Opinion of Probable Construction Cost is \$275,000.00."

and **Replace** with the following:

"The Engineer's Opinion of Probable Construction Cost is \$300,000.00."

- 4) Section 02737 WATER SUPPLY WELL REDEVELOPMENT, Page 11, Paragraph 2.5, **Add** the following paragraph:
 - "I. Provide submersible potting kits for the flow meter primary sensors to protect the meters from extended flood conditions."
- 5) Section 02737 WATER SUPPLY WELL REDEVELOPMENT, Page 12, Paragraph 3.3.A.1, after the first sentence, **Add** the following sentence:

"The total time of surging for each well shall be based on 1.5 hours of surging per foot of screen length."

6) Section 02737 – WATER SUPPLY WELL REDEVELOPMENT, Page 14, Paragraph 3.3.B.2.a, **Delete** the table:

Well No	Chemical Addition	Chemical Removal
Well No	& Surge	& Blow Out
EWF 1	8 Hours	8 Hours
EWF 9	4 Hours	4 Hours
SOD 4	16 Hours	16 Hours
SOD 5	8 Hours	8 Hours

and **Replace** with the following:

Well No	Chemical Addition & Surge	Chemical Removal & Blow Out
EWF 1	9.5 Hours	9.5 Hours
EWF 9	6 Hours	6 Hours
SOD 4	19 Hours	19 Hours
SOD 5	11.5 Hours	11.5 Hours

- 7) Section 02737 WATER SUPPLY WELL REDEVELOPMENT, Appendix A, Figure 1, **Change** the 8" x 8" Tee W/Blind Flange to a 6" x 6" Tee W/Blind Flange, corrected Figure 1 enclosed.
- 8) Section 02737 WATER SUPPLY WELL REDEVELOPMENT, Appendix A, Figure 2, **Change** the 8" x 8" Tee W/Blind Flange to a 6" x 6" Tee W/Blind Flange, corrected Figure 2 enclosed.

QUESTIONS:

1. Can more than one well be out of service at a time.

Answer: Yes, one well from each well field may be removed from service at any one time.

2. While onsite we discussed that PWS-5 does not need a new Mag meter, and the drawings in the original specifications confirm that. Addendum #2 has a line item for the procurement and installation of a new Mag Meter for PWS-5. I was hoping for clarification to confirm that PWS-5 does not need a new Mag Meter or if I need to get pricing for that as well.

Answer: A new Mag Meter is not needed for PWS-5; please see the updated Bid Tab enclosed in this Addendum.

3. During the pre-bid meeting it was stated that the work hours would be from 7:00 AM to 4:30 PM. Would longer work days (10-12 hours) be permitted?

<u>Answer:</u> Yes longer 12 hour work days are permitted. Work is not permitted on weekends or holidays without Owner approval.

4. During the Pre-Bid Meeting several Contractors inquired as to whether the pH and Chlorine monitoring of the cleaning fluids could be in batches rather than continuous monitoring.

<u>Answer:</u> The pH and chlorine concentration of the spent acid solutions may be monitored by batches in the neutralizing tanks.

THIS ADDENDUM MUST BE SIGNED	O AND ATTACHED TO YOUR BID.	
Acknowledged by	Date	

2019 Well Redevelopment Project Warren County Water & Sewer Department

Ite	m Description	Total Cost
EAST	WELLFIELD	
	Production Well No. 1 (PWE-1)	
1	Video Inspection - Pre and Post redevelopment	
2	Removal of well pump; well pump disassemble, inspection, and evaluation; sand blast and epoxy painting of column piping and pump; and well pump reinstallation.	
3	Well Redevelopment	
4	Hydraulic testing of well	
5	Procure and Install new Mag Meter	
6	Replace the existing level sensor	
	Production Well No. 9 (PWE-9)	
1	Video Inspection - Pre and Post redevelopment	
2	Removal of well pump; well pump disassemble, inspection, and evaluation; sand blast and epoxy painting of column piping and pump; and well pump reinstallation.	
3	Well Redevelopment	
4	Hydraulic testing of well	
5	Procure and Install new Mag Meter	
6	Replace the existing level sensor	
SOD F	ARM WELLFIELD	
	Production Well No. 4 (PWS-4)	
1	Video Inspection - Pre and Post redevelopment	
2	Removal of well pump; well pump disassemble, inspection, and evaluation; sand blast and epoxy painting of column piping and pump; and well pump reinstallation.	
3	Well Redevelopment	
4	Hydraulic testing of well	
5	Procure and Install new Mag Meter	
6	Replace the existing level sensor	
	Production Well No. 5 (PWS-5)	
1	Video Inspection - Pre and Post redevelopment	
2	Removal of well pump; well pump disassemble, inspection, and evaluation; Cutting and rethreading of column pipe; sand blast and epoxy painting of column piping and pump; and well pump reinstallation.	_
3	Well Redevelopment	
4	Hydraulic testing of well	
5	Replace the existing level sensor	
	TOTAL BASE BID PRICE	

Plan Holders List

2019 WELL REDEVELOPMENT PROJECT

Individuals or companies can be added to the plan holders list by contacting Kathryn Gilbert at kathryn.gilbert@co.warren.oh.us.

Name	Company	Phone Number	E-mail Address
Kathryn Gilbert	Warren County Water & Sewer	(513) 695-1645	kathryn.gilbert@co.warren.oh.us
Matt Barnes	Layne – A Granite Company	(513) 424-7287	matt.barnes@gcinc.com
Ken Cramer	Peerless Midwest, Inc.	(330) 592-4146	Ken.cramer@suez.com

ADDENDUM #2

2019 WELL REDEVELOPMENT PROJECT

3 PAGES TOTAL

This Addendum No. 2 is issued to make certain revisions, additions, and clarifications to the original Contract Documents and shall be incorporated into the original Specifications. This Addendum takes precedence over any and all information previously issued. No other revisions to the Specifications are to be inferred.

BID/CONTRACT DOCUMENTS	
Please insert Bid Tab and Alternate Bid T	Tab enclosed in Section 00100 when submitting.
THIS ADDENDUM MUST BE SIGNED	O AND ATTACHED TO YOUR BID.
Acknowledged by	Date

2019 Well Redevelopment Project Warren County Water & Sewer Department

Iter	n Description	Total Cost
EAST	WELLFIELD	
	Production Well No. 1 (PWE-1)	
1	Video Inspection - Pre and Post redevelopment	
2	Removal of well pump; well pump disassemble, inspection, and evaluation; sand blast and epoxy painting of column piping and pump; and well pump reinstallation.	
3	Well Redevelopment	
4	Hydraulic testing of well	
5	Procure and Install new Mag Meter	
6	Replace the existing level sensor	
	Production Well No. 9 (PWE-9)	
1	Video Inspection - Pre and Post redevelopment	
2	Removal of well pump; well pump disassemble, inspection, and evaluation; sand blast and epoxy painting of column piping and pump; and well pump reinstallation.	
3	Well Redevelopment	
4	Hydraulic testing of well	
5	Procure and Install new Mag Meter	
6	Replace the existing level sensor	
SOD F	ARM WELLFIELD	
	Production Well No. 4 (PWS-4)	
1	Video Inspection - Pre and Post redevelopment	
2	Removal of well pump; well pump disassemble, inspection, and evaluation; sand blast and epoxy painting of column piping and pump; and well pump reinstallation.	
3	Well Redevelopment	
4	Hydraulic testing of well	
5	Procure and Install new Mag Meter	
6	Replace the existing level sensor	
	Production Well No. 5 (PWS-5)	
1	Video Inspection - Pre and Post redevelopment	
2	Removal of well pump; well pump disassemble, inspection, and evaluation; Cutting and rethreading of column pipe; sand blast and epoxy painting of column piping and pump; and well pump reinstallation.	
3	Well Redevelopment	
4	Hydraulic testing of well	
5	Procure and Install new Mag Meter	
6	Replace the existing level sensor	
	TOTAL BASE BID PRICE	

2019 Well Redevelopment Project - Alternate Bid Items Warren County Water & Sewer Department

Item	Description	Cost			
Item	Description	PWE-1	PWE-9	PWS-4	PWS-5
1	Replace pump and motor				
2	Replace pump and reuse the existing motor				
3	Replace the motor and reuse the existing pump				
4	Replace all sections of column pipe				
5	Replace line shafts from motor to pump including couplings, and bearings.				
6	Replace all wear rings (impeller and bowl)				
7	Replace all impellers & collets				
8	Replace pump shaft				
9	Replace all pump bearings (shaft, sleeve, bowl, suction base)				
10	Replace motor bearings				

ADDENDUM #1

2019 WELL REDEVELOPMENT PROJECT

1 PAGES TOTAL

This Addendum No. 1 is issued to make certain revisions, additions, and clarifications to the original Contract Documents and shall be incorporated into the original Specifications. This Addendum takes precedence over any and all information previously issued. No other revisions to the Specifications are to be inferred.

BID/CONTRACT DOCUMENTS

1) SECTION 000400 – INVITATION TO BIDDERS. In the first paragraph, *Delete* the words:

"Separate sealed bids for the Lower Little Miami WWTP Sewer Maintenance Building Project will be received by the Warren County Board of Commissioners at the Office of the Warren County Commissioners, 406 Justice Drive, Lebanon, Ohio 45036, until June 13, 2019 @ 11:00 a.m. and then at said time publicly opened and read aloud."

and *Replace* with the following:

"Separate sealed bids for the 2019 Well Redevelopment Project will be received by the Warren County Board of Commissioners at the Office of the Warren County Commissioners, 406 Justice Drive, Lebanon, Ohio 45036, until November 7, 2019 @ 11:00 a.m. and then at said time publicly opened and read aloud."

THIS ADDENDUM MUST BE SIGNED	O AND ATTACHED TO YOUR BID.
Acknowledged by	Date

BID/CONTRACT DOCUMENTS

2019 WELL REDEVELOPMENT PROJECT

WARREN COUNTY WATER & SEWER DEPARTMENT

WARREN COUNTY BOARD OF COMMISSIONERS 406 JUSTICE DRIVE LEBANON, OHIO 45036 (513) 695-1250

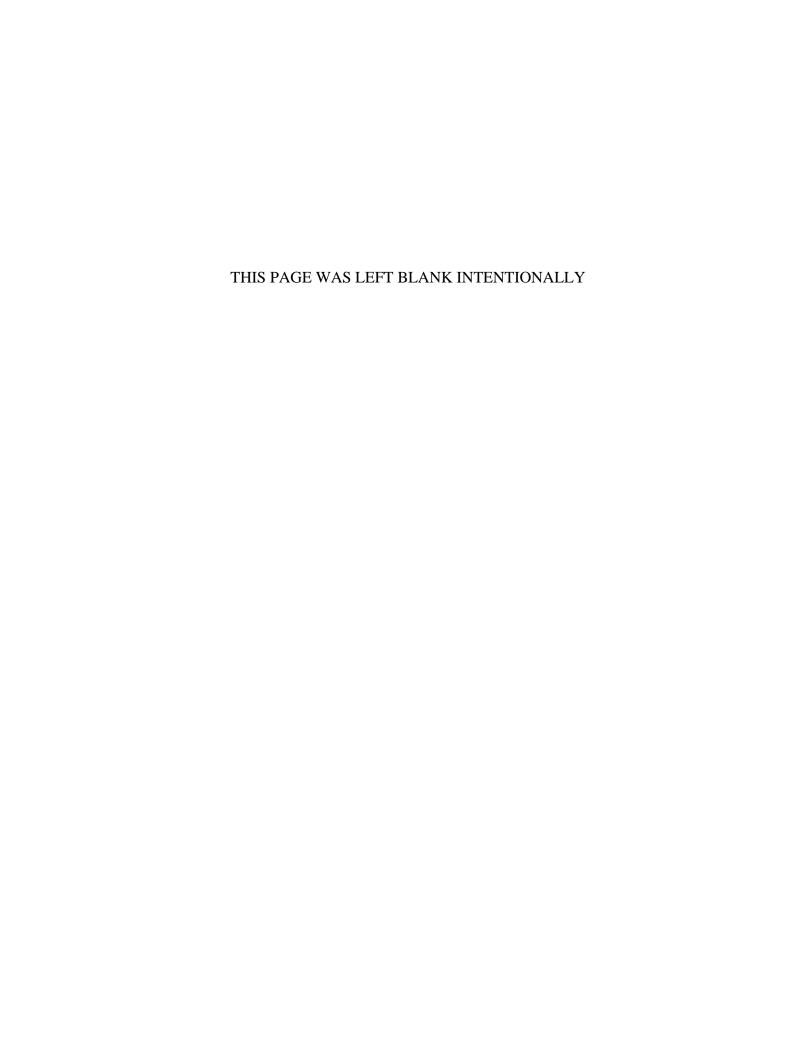


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EMPLOYMENT OPPORTUNITY AFFIDAVIT

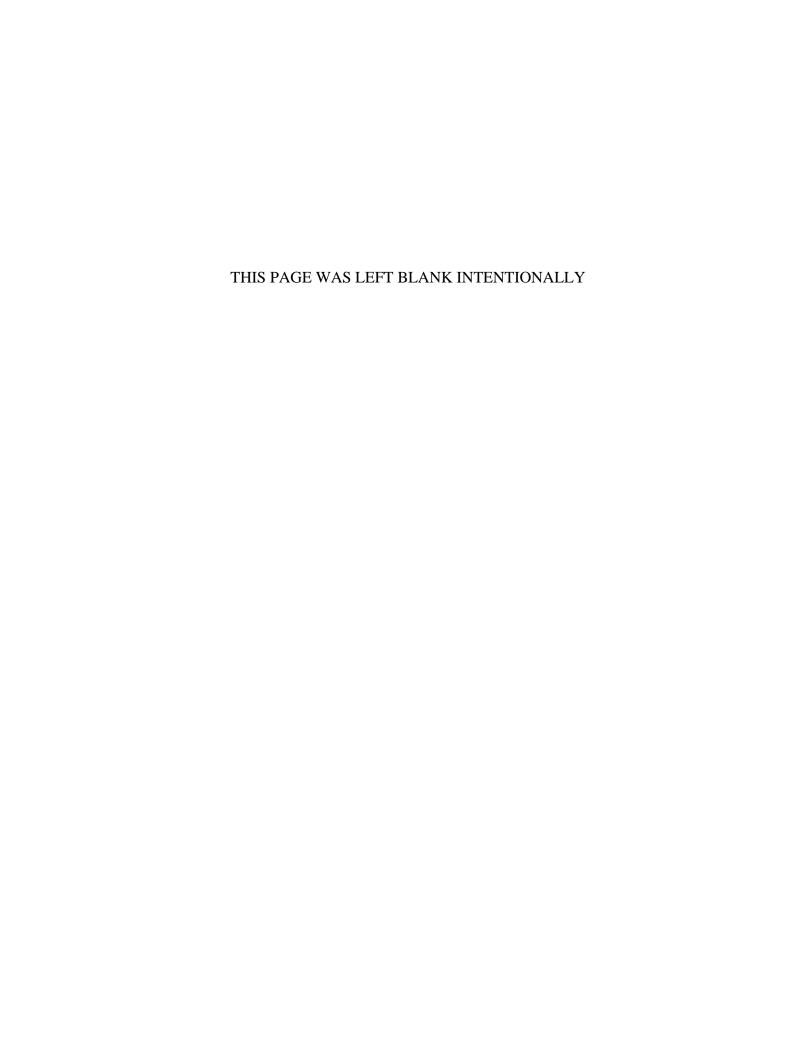
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SECTION 000400 - INVITATION TO BIDDERS

Separate sealed bids for the Lower Little Miami WWTP Sewer Maintenance Building Project will be received by the Warren County Board of Commissioners at the Office of the Warren County Commissioners, 406 Justice Drive, Lebanon, Ohio 45036, until June 13, 2019 @ 11:00 a.m. and then at said time publicly opened and read aloud.

Bid documents, drawings and specifications are available online at the Warren County's Website at http://www.co.warren.oh.us/commissioners/Resources/Bids/Default.aspx. Questions regarding the technical specifications should be directed to Kathryn Gilbert at the Warren County Water and Sewer Department, (513) 695-1645. A non-mandatory Prebid Meeting will be held at 9:00am on Wednesday, October 23, 2019 at the Richard A Renneker Water Treatment Plant, 6193 Striker Road, Hamilton Township, Ohio.

The project description: The project consists of the rehabilitation of four drinking water wells located at two well fields in Warren County. The work generally consists of pump removal, video inspection of the well screen and casing, chemical and mechanical redevelopment of the wells, step down and 24-hour pump testing, and plumbness/ alignment testing. The estimated contract value is \$275,000.00.

A Bid guaranty, as required by Ohio Revised Code, Section 153.54, shall accompany each proposal submitted, as follows:

- 1. A Certified check, cashier's check, or letter of credit equal to ten (10) percent of the bid. A letter of credit may only be revocable by the Owner. Upon entering into a contract with the Owner, the contractor must file a performance bond for the amount of the contract, and the bid guaranty will then be returned to the successful and unsuccessful bidders upon contract execution.

 OR
- 2. A form of bid guaranty bond (attached) for the full amount of the bid. Such bond is retained for the successful bidder, but returned to unsuccessful bidders after the contract is executed.

Attention of bidders is called to all of the requirements contained in the bid packet. No bidder may withdraw his bid within sixty (60) days after the actual date of the opening thereof. All bids shall be properly signed by an authorized representative of the bidder. All bids shall be sealed and plainly marked:

BID OPENING- 2019 WELL REDEVELOPMENT PROJECT, NOVEMBER 7, 2019 @ 11:00 A.M.

Warren County reserves the right to reject any or all bids submitted, to waive any irregularities in bids, and enter into a contract with the Bidder who in Warren County's consideration offered the lowest and best bid.

By order of the Board of County Commissioner, County of Warren, State of Ohio.

Tina Osborne, Clerk

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SECTION 00100 - BID PROPOSAL

The undersigned declares that the only persons or parties in this Bid are as stated; that the Bid in make without any collusion with other persons, firms, or corporations; that all the Contract Documents as prepared have been carefully examined; that the undersigned is fully informed in regard to all conditions pertaining to the Work and the place where it is to be done, and from them the undersigned makes this Bid. The undersigned do hereby propose to furnish all labor, materials, tools, equipment, etc., necessary to complete the work at the Warren County Sod Farm and East Well Fields. The premiums for all Bonds required shall be paid by the Contractor and shall be included in the Contract Price. The undersigned Bidder further agrees that the Bid Security accompanying this Bid shall become the property of the County if the Bidder fails to execute the Agreement.

The undersigned hereby agrees that the Contract Time shall commence on the date stipulated in the Notice to Proceed and to complete the work in accordance with the terms as stated in the Contract Agreement, and in accordance with the following schedule milestones:

The Owner shall issue a "Notice to Proceed" within 14 days of contract execution. The start of the project shall be determined by the successful bidder and identified in a written project schedule submitted by the Bidder to the Owner within 14 days of executing the contract. The Bidder shall complete the work in accordance with the terms as stated in the Contract Agreement, and in accordance with the following schedule milestones:

- 1. Substantial completion shall be within 180 days from Notice to Proceed
- 2. Final completion, site restoration work complete, and Contract Closeout shall be within 210 days from Notice to Proceed

The undersigned acknowledges receipt of the following Addenda:

No	, dated	, 2019
No	, dated	, 2019
No	, dated	, 2019

Bids shall include all costs incurred for the Work including materials, equipment, supplies, labor, permit fees, taxes, insurance, miscellaneous costs, overhead, and profit. All Material must comply with the specifications shown on the contract drawings.

The written/typed Total Bid price is for the convenience of the Owner in comparing bids. Any discrepancy between the actual sum of the line item totals and the written/typed total bid price shall be resolved in favor of the actual sum of the correct individual line item.

The undersigned hereby certifies under the penalty of perjury that this bid is in all respects bona fide, fair and made without collusion or fraud with any other person or entity. The bid proposals shall remain in full force and effect for ninety (90) days after the date of opening bids. The full name and address of all persons and parties interested in the foregoing bids as principals are as follows:

Individual, Partnership, or Corporation	
Signature of Corporate Officer, President, or Owner	
Notice of acceptance should be mail or delivered to the follow	ving:
(Contact Name)	
(Contact Title)	
(Company Name)	
(Business Address)	
(City and State)	
(Contact Number)	
Date:	

SECTION 00120 – EXCEPTION SHEET

Exceptions: Exceptions to any bi	d specification must	be clearly stated on th	is sheet. This sheet
must be submitted with each bid.	If there are no excep	otions, please indicate	"none" below.

1)		 	
10)	 		

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SECTION 00130 – BIDDER IDENTIFICATION

ATTENTION BIDDER:	Please fill out this form and submit with your bid.
COMPANY NAME:	
CHIEF EXECUTIVE OFFICER:	
ADDRESS:	
PHONE NUMBER:	
FAX NUMBER:	
PROJECT CONTACT PERSON:	
PHONE NUMBER:	
E-MAIL ADDRESS:	
FEDERAL ID #:	
WEBSITE ADDRESS:	

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SECTION 00200 – GENERAL INSTRUCTIONS TO BIDDERS

1. **Receipt and Opening of Bids:** The Warren County Board of Commissioners (herein referred to as "Owner"), invites bids on the form attached hereto, all blanks of which must be appropriately filled in. Bids will be received by the Owner at the Office of the Warren County Board of Commissioners until November 7, 2019 @ 11:00 a.m. and then at said office publicly opened and read aloud. The envelopes containing the bids must be sealed, addressed to Warren County Board of Commissioners at 406 Justice Drive, Lebanon, Ohio 45036, and shall be clearly marked

BID OPENING- 2019 WELL REDEVELOPMENT PROJECT, NOVEMBER 7, 2019 @ 11:00 A.M.

The Owner may consider informal any bid not prepared and submitted in accordance with the provisions hereof and may waive any informalities or reject any and all bids. Any bid may be withdrawn prior to the above scheduled time for the opening of bids or authorized postponement thereof. Any bid received after the time and date specified shall not be considered. No bidder may withdraw a bid within 60 days after the actual date of the opening thereof.

- 2. <u>Bid Documents:</u> Bid documents, drawings, addenda, plan holders list, and other information are available online, free of charge, at the Warren County's Website at http://www.co.warren.oh.us/commissioners/Resources/Default.aspx. Contact Kathryn Gilbert at kathryn.gilbert@co.warren.oh.us to be added to the plan holders list. All Addenda will be posted on the aforementioned website and shall not be mailed to the bidders. Bidders shall be responsible for checking the website prior to submitting their bids.
- 3. Withdraw of Bid: A Bidder may withdraw his bid from consideration if the price bid was substantially lower than the other bids, provided the bid was submitted in good faith and the reason for the price being substantially lower was a clerical mistake as opposed to a judgment mistake and was actually due to an unintentional omission of a substantial quantity of work, labor or material made directly in the compilation of the bid. Request to withdraw such bid must be made in writing and filed with the Owner within two business days after the opening of bids and prior to the acceptance thereof.
- 4. **Preparation of Bid:** Each bid must be submitted on the prescribed form and such documents as hereunder described. All blank spaces for bid prices must be filled in, in ink or typewritten, in both words and figures, and the foregoing certifications must be fully completed and executed when submitted.
- 5. **Method of Bidding:** Bids shall be submitted at the time and place indicated in the Invitation to Bidder and shall be included in a sealed envelope, marked with the project title and name and address of the bidder and accompanied by the bid security and other required documents.

Bids may be modified or withdrawn by an appropriate document duly executed (in the manner that a bid must be executed) and delivered to the place where bids are to be submitted at any time prior to the opening of bids.

The Owner invites unit price bids for the construction described in the plans and specifications. These unit prices shall be extended by estimated quantities to develop a total price for the project.

The estimate of quantities of work, if included in the Proposal, is approximate only, and will not become the basis for calculating final payment for the work. However, the estimated quantities shall be used by the Owner in calculating the total amount of the Proposal for comparison of bids.

If the total price received from the lowest and best bidder exceeds the amount of funds available to finance the contract, the Owner may:

- a. Reject all bids;
- b. Augment the funds available in an amount sufficient to enable award to the lowest and best bidder or bidders:
- c. Reduce the scope of work by eliminating certain items of work to produce a total bid which is within available funds;
- d. Reduce the scope of work by reducing the quantity of certain items of work to produce a total bid which is within available funds;
- e. Reduce the scope of work by a combination of adjustments as outlined in "c" and "d" above to produce a total bid which is within available funds.
- f. The Owner may reject all bids or may award the contract on the base bid or on the base bid combined with additions or deductible alternates as produces a net amount which is within the available funds.
- g. The Owner may consider informal and may reject any bid not prepared and submitted in accordance with the provisions hereof. The Owner reserves the right to reject all bids, to waive any informalities or irregularities in the bids received, and to accept any bid which is deemed lowest and best.
- 6. **Qualification of Bidder:** The Owner may make such investigations as he/she 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. 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; conditional bids will not be accepted.
- 7. **<u>Bid Security:</u>** Each bid must be accompanied by cash, cashiers check, certified check of the bidder, letter of credit equal to ten (10) percent of bid, or a bid bond prepared on the form of bid bond attached hereto, duly executed by the bidder as principal and having as surety thereon a surety company approved by the Owner. (See Invitation to Bidders for required amounts) Such cash, checks or bid bonds will be returned to bidders after the Owner has awarded the bid and

has executed the contract, or, if no award has been made within 60 days after the date of the opening of bids, upon demand of the bidder at any time thereafter, so long as he/she has not been notified of the acceptance of his/her bid.

- 8. <u>Liquidated Damages for Failure to Enter into Contract:</u> The successful bidder, upon his/her failure or refusal to execute and deliver the contract and bonds required within 10 days after he/she has received notice of the acceptance of his/her bid, shall forfeit to the Owner, as liquidated damages for such failure or refusal, the security deposited with his/her bid.
- 9. <u>Time of Completion and Liquidated Damages:</u> The Owner shall issue a "Notice to Proceed" within 14 days of contract execution. The start of the project shall be determined by the successful bidder and identified in a written project schedule submitted by the Bidder to the Owner within 14 days of executing the contract. The Bidder shall complete all work within the following requirements:
 - a. Substantial completion shall be within 180 days from Notice to Proceed.
 - b. Final completion, site restoration work complete, and Contract Closeout shall be within 210 days from Notice to Proceed.

Bidder agrees to pay as liquidated damages the sum of \$200.00 for each consecutive calendar day thereafter. See the General Conditions and Supplemental Conditions for the definition and requirements of substantial completion.

- 10. No Damage for Delay: No payment, compensation or adjustment of any kind shall be made to the contract price for damages incurred by the contractor because of hindrances or delays in the progress of the work from any cause that is not proximately caused by the Owner's action or failure to act. Whether such hindrances or delays are avoidable or unavoidable, the contractor agrees that he or she will make no claim for compensation, damages or mitigation of liquidated damages for any such delays. Examples of delays include (but are in no manner limited to) obtaining all necessary permission from any government agency or any private party, any act or failure to act by any other contractor, subcontractor and/or supplier, all foreseen and unforeseen events and any conditions or acts of God. It is understood and agreed that the contractor assumes all risks of delays in prosecuting or completing the work under the contract that are not proximately caused by the Owner's action or failure to act. The contractor will accept in full satisfaction for such delays, an extension of time, if any, agreed to by the Owner.
- 11. <u>Conditions of Work</u>: Each bidder must inform him/herself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his/her obligation to furnish all material and labor necessary to carry out the provisions of his/her contract. Insofar as possible the contractor, in carrying out the work, must employ such methods or means or will not cause any interruption of or interference with the work of any other contractor. No plea of ignorance of conditions that exist or that may hereafter exist, or of conditions or difficulties that may be encountered in the execution of the work as the result of failure to make such examination and investigation, will be accepted as an excuse for any failure or omission on the part of the Contractor to fulfill in every respect, all the requirements of the Contract, nor will the same be accepted as a basis for any

claim whatsoever for extra compensation or for an extension of time.

- 12. Addenda and Interpretations: No interpretation of the meaning of the plans, specifications or other pre-bid documents will be made to any bidder orally. Every request for such interpretation must be in writing to Kathryn Gilbert at kathryn.gilbert@co.warren.oh.us. To be given consideration all questions must be received by 4:00 pm on Wednesday, October 30, 2019. All such interpretations and any supplemental instructions will be in the form of written addenda to the specifications which, if issued, will be posted on the Warren County Commissioners website, no later than three days prior to the date fixed for the opening of bids. Failure of any bidder to monitor the website and download any such addendum or interpretations shall not relieve such bidder from any obligation under his/her bid as submitted. All addenda so issued shall become part of the contract documents.
- 13. <u>Security for Faithful Performance:</u> Simultaneously with his/her delivery of the executed contract, the Contractor shall furnish a performance (surety) bond as security for faithful performance of this contract and for the payment of all persons performing labor on the project under the contract and furnishing materials in connection with the contract. The surety on such bond or bonds shall be a duly authorized surety company satisfactory to the Owner. Please note that upon execution of the Contract if a Bid Guaranty/Contract Bond was submitted with your original bid a Performance Bond will not be required.
- 14. **Power of Attorney:** Attorneys-in-fact who sign bid bonds or contract bonds must file with each bond a certified and effectively dated copy of their power of attorney.
- 15. <u>Laws and Regulations:</u> The bidder's attention is directed to the fact that all applicable State laws, municipal ordinances, and the rules and regulations of all authorities having jurisdiction over construction of the project shall apply to the contract throughout, and they will be deemed to be included in the contract the same as though herein written out in full.
- 16. <u>Method of Award:</u> The Owner may reject all bids or may award the contract on the base bid or on the base bid combined with additions or deductible alternates, to the lowest and best bidder, as produces a net amount which is within the available funds.
- 17. **Obligation of Bidder:** At the time of the opening of bids each bidder will be presumed to have inspected the site and to have read and to be thoroughly familiar with the plans and contract documents (including all addenda). The failure or omission of any bidder to examine any form, instrument or document shall in no way relieve any bidder from any obligation in respect of his/her bid.
- 18. <u>Safety Standards and Accident Prevention:</u> With respect to all work performed under this contract, the Contractor shall:
 - a. Comply with the safety standards provisions of applicable laws, building and construction codes and the "Manual of Accident Prevention in Construction" published by the Associated General Contractors of America, the requirements of the Occupational Safety and Health Act of 1970 (Public Law 91-596), and the requirements of title 29 of the code of Federal Regulations, Section 1518 as published in the "Federal Register", Volume 36, N. 75, Saturday, April 17, 1971.

- b. Exercise every precaution at all times for the prevention of accidents and the protection of persons (including employees) and property.
- c. Maintain at his/her office or other well known place at the job site, all articles necessary for giving first aid to the injured, and shall make standing arrangements for the immediate removal to a hospital or doctor's care of persons (including employees) who may be injured at the job site. In no case shall employees be permitted to work at a job site before the employer has made a standing arrangement for removal of injured persons to a hospital or a doctor's care.
- 19. **Examination of Site:** Each bidder shall, and is hereby directed to inspect the entire site of the proposed work and judge for him/herself as to all the circumstances affecting the cost and progress of the work and shall assume all patent and latent risks in connection therewith.
- 20. <u>Water Supply:</u> All water for construction purposes, except for the expense of having water conveyed about the work, will be provided by the Owner.
- 21. **Working Facilities:** The plans show, in the general manner, the existing structures and the land available for construction purposes. The bidders must satisfy themselves of the conditions and difficulties that may be encountered in the execution of the work at this site.
- 22. **Permits:** No permits are required for the proposed work.
- 23. <u>Signature of Bidders:</u> The firm, corporate or individual name of the bidder must be signed in ink in the space provided for the signatures on the proposed blanks. In the case of a corporation, the title of the officer signing must be stated and such officer must be thereunto duly authorized and the seal of said corporation duly affixed. In the case of a partnership, the signature of at least one of the partners must follow the firm name, using the term "member of the firm." In the case of an individual, use the terms "doing business as", or "sole owner." The bidder shall further state in his proposal the name and address of each person or corporation interested therein.
- 24. **Right to Accept or Reject Proposals:** The Owner may consider informal and may reject any bid not prepared and submitted in accordance with the provisions hereof. The Owner reserves the right to reject all bids, to waive any informalities or irregularities in the bids received, and to accept any bid which is deemed lowest and best.
- 25. **Non-Collusion Affidavit:** The successful bidder will be required to submit a non-collusion affidavit on the form included in these Bid/Contract documents (SECTION 00220). This affidavit shall be dated and executed as part of this bid.
- 26. **EEO Compliance:** Bidders please see SECTION 00340 for EEO Compliance Requirements and Affidavit.
- 27. <u>Wage Rates:</u> In the event that the rate of wages paid for any trade or occupant in the locality where such work is being performed are under current collective agreements or understandings between bona fide organizations of labor and employer, then the wages to be paid shall be not less than such agreed wage rates, nor less than the minimum rates compiled by

the Federal Labor Standard Act. Copies of these prevailing wage rates have been included in these specifications. Every Contractor and Subcontractor who is subject to Ohio Revised Code, Chapter 4115 shall, as soon as he begins performance under his contract with the Owner, supply the Prevailing Wage Coordinator for the Owner a schedule of the dates on which he is required to pay wages to employees. He shall also deliver to the Prevailing Wage Coordinator within three weeks after each pay date, a certified copy of his payroll which shall exhibit for each employee paid any wages, name, current address, social security number, number of hours worked each day of the pay period and the total for each week, hourly rate of pay, job classification, fringe payments, and deductions from wages. The certification of each payroll shall be executed by the Contractor, Subcontractor, or duly appointed agent thereof and shall recite that the payroll is correct and complete and that the wage rate shown is not less that those required by the contract.

In case the Owner orders the Contractor to perform extra or additional work which may make it necessary for the Contractor or any Subcontractor under this contract to employ a person not herein specified, the Owner will include in the contract change order for such extra or additional work, a minimum wage rate for such trade or occupation, and insofar as such extra or additional work is concerned, there shall be paid to each employee engaged in work of such trade or occupation, not less than the wage so included. Insofar as possible, local labor shall be employed on this work.

- 28. <u>Subletting of Contract</u>: The Contractor shall not sublet, sell, transfer or assign any portion of the contract without written consent of the Owner of his designated agent. When such consent is given, the Contractor will be permitted to sublet a portion thereof, but shall perform with his own organization, work amounting to no less than fifty percent of the total contract cost, except that any time designated in the contract before computing the amount of work required to be performed by the Contractor with his own organization, no subcontract, or transfer of contract, shall in any way release the Contractor of his liability under the contract and bonds.
- 29. **Required Insurance:** In accordance with the specifications, the Contractor, without restricting the obligations and liabilities assumed under the Contract Documents, shall at his own cost and expense purchase and maintaining in force until final acceptance of his work, the forms of insurance coverage listed below.

Certificates from the insurance carrier stating the limits of liability and expiration date shall be filed with the Owner before operations are begun. Such certificates shall not merely name the types of policy provided, but shall specifically refer to this Contract and shall name the Board of Warren County Commissioners as additionally insured. However, the original policy for Owner's Protective Bodily Injury (Item F) and Property Damages (Item G) shall at this time be delivered to the Owner for its possession.

All policies as hereinafter required shall be so written that the Owner will be notified of cancellation or restrictive amendment at least ten days prior to the effective date of such cancellation or amendment.

Item A - Workmen's Compensation and/or Employer's liability Insurance as required or specified by State Law.

Item B – Comprehensive General Liability Insurance: In an amount not less than \$1,000,000.00 per occurrence for Bodily Injury and \$500,000 for explosion underground and collapse, commonly known as "XCU." The following endorsement documents provided by Warren County:

- a. CG 20 10 10 01 additional insured endorsement (or equivalent)
- b. CG 20 37 10 01 additional insured endorsement (or equivalent)
- c. CG 25 03 03 97 designated location aggregate (or equivalent)

General Liability needs to be written on Primary/Non-contributory basis for the benefit of the additional insured.

Item C – Umbrella: In an amount not less than \$1,000,000 occurrence and \$1,000,000 aggregate. Umbrella needs to attach to General Liability, Employers Liability, Auto Liability. Umbrella needs to be written on follow-form primary.

Item D - Bodily Injury Liability Insurance covering motor vehicles either owned by the Contractor or being used in connection with the prosecution of the work embraced under this contract.

Item E - Property Damage Liability Insurance covering motor vehicles either owned by the Contractor or being used in connection with the prosecution of the work embraced under this contract.

Item F - (If Applicable) - Such Protective (including Railroad Protective) and Contractual Bodily Injury Liability Insurance and such Protective (including Railroad Protective) and Contractual Property Damage Liability Insurance as shall be required by the railroad and other utility companies whose property, facilities or rights-of-way may be affected by the work to be done under this contract, in such amounts and in such form as each such utility company may require.

If any part of the work is sublet, insurance of the same types and limits as required by above items numbered A, B, C, D, E, F, and I shall be provided by or on behalf of the Subcontractors to cover that part

of the work they have contracted to perform including Property Damage Liability Special Hazards coverage if so required by this contract.

Protective and Contractual Bodily Injury Liability Insurance required by Item F (if applicable) shall be in an amount and form as each railroad or utility company may require.

<u>Builders Risk Insurance:</u> All Risk form, including subsidence and theft of materials from the job site. Such coverage shall be maintained until final acceptance of the Contract by the Owner and payable to the Owner for the benefit of the contractor. The limit for Builders Risk shall be the full value of construction.

- 30. <u>Maintenance of Property:</u> All work activities including storage and stockpiling of materials, is to be conducted within the Owner's property. Bracing, scaffolding, and rigging shall be located within the property unless work agreements are secured from the adjacent property Owners. It is the Contractor's responsibility to secure these work agreements, if deemed necessary. Copies of the work agreements shall be delivered to the Engineer and Owner prior to any work beginning on the affected property.
- 31. **Foreign Corporation and Contractors:** Definition: "Foreign Corporation" means a corporation incorporated under the laws of another state. No contract shall be entered into with a foreign corporation until the Secretary of State has certified that such corporation is authorized to do business in Ohio: and until, if the bidder so awarded the Contract is a person or partnership, it has filed with the Secretary of State a Power of Attorney designating the Secretary of State as its agent for the purpose of accepting service of summons in any action brought under Ohio Revised Code, Section 153.05 or under Sections 4123.01 to 4123.94, inclusive.
- 32. <u>Subcontracts:</u> Contractor shall provide upon request of the Owner an explanation of all subcontractors intended to be used in performance of the work. In the event the Owner does not object, Contractor may have such work performed by a subcontractor. Contractor shall bind every subcontractor to, and every subcontractor must agree to be bound by the terms of, the Agreement, as far as applicable to the subcontractor's work particularly pertaining to Prevailing Wages and EEO requirements. Nothing contained in the Agreement shall create any contractual relationship between any subcontractor and Owner, nor create any obligations on the part of the Owner to pay or see to the payment of any sums to any subcontractor.
- 33. **Real and/or Personal Property Tax Affidavit:** All bidders must complete the Real and/or Personal property tax affidavit (Section 00320) and submit with your bid. This section should be fully completed whether or not you as a vendor/contractor own property in Warren County, Ohio.
- 34. **Description of Project:** This project consists of the rehabilitation of four drinking water production wells located at two different well fields in Warren County. The work generally consists of pump removal, video inspection of the well screen and casing, chemical and mechanical redevelopment of the wells, step down and 24-hour pump testing, and plumbness/ alignment testing.
- 35. **Scope of Work:** Provide all work as described in the Specifications and Drawings herein as necessary to provide for project completion.
- 36. **Required Forms:** Each Bidder shall complete and submit the following forms with his/her bid:

SECTION 00100 – Bid Proposal

SECTION 00120 – Exception Sheet

SECTION 00130 – Bidder Identification

SECTION 00220 - Non-Collusion Affidavit

SECTION 00260 - Bid Guaranty & contract Bond

SECTION 00300 – Experience Statement

SECTION 00320 – Affidavit of Non-Delinquency of Taxes SECTION 00340 – Certificate of Compliance Non-Discrimination and Equal Employment Opportunity Affidavit SECTION 00360 – Findings for Recovery Affidavit

- 37. **Subcontractors:** The successful Contractor may be required, at the request of the Owner, to submit a list of sub-contractors and/or suppliers for said project.
- 38. Additional Obligations Upon Contact Award: Upon award of the bid but prior to execution of the final agreement and notice to proceed, the Contractor shall submit all of the following documents, completed as required:
 - 1) Contract
 - 2) Performance Bond
 - 3) Certificates of Insurance
- 39. Entire bid packet must be completed (except SECTION 00400 Contract) and returned with bid proposal, as the entire bid packet becomes part of the contract documents.
- 40. <u>Changes In Work:</u> Owner may find it necessary and desirable to make changes and/or alterations in the lines, plans, equipment, or materials from time to time, either before or after construction has begun.

The Owner shall notify the Contractor in writing about all changes in the work at any time, and it shall be completed according to the said changes without any alteration in the Contract Price except in those cases where the changes materially affect the amount of work to be done and the cost thereof. The decision of the Owner regarding changes in work shall be final in all cases where no alteration in price is involved. Changes in work which involve any alteration in the amount to be paid to the Contractor shall not be commenced until approved in writing by the Owner.

If the Contractor claims that any written instructions from the Owner, by drawings or otherwise, involved extra cost or an extension of time, he/she shall so notify the Owner in writing within seven (7) days after receipt of such instructions and before proceeding to execute the work.

41. **Partial Payments to Contractor:** The Owner will make partial payments to the Contractor during construction on the basis of an estimate of the value of work performed during the preceding calendar month under this Contract. The partial payment shall be made in accordance with the applicable sections of the Ohio Revised Code. Owner will furnish an estimate of the quantities of work. Owner will determine the value of work performed and prepare the monthly partial estimate.

All materials and work covered by partial payments made shall thereupon become the sole property of the Owner. This provision shall not be construed as relieving the Contractor from the sole responsibility for the care and protection of work upon which payments have been made or the restoration of any damaged work. The payment of monthly partial estimates does not waive the right of the Owner to require the fulfillment of all the terms of the Contract Documents.

- 42. Owner's Right to Withhold Certain Amounts and Make Applicable Thereof: The Contractor may be required by the Owner to furnish from time to time, satisfactory evidence that all persons who have done work or furnished materials under this Contract, or may have suffered and claimed damage on account of the Contractor's operation, have been fully paid or secured; and in case such evidence is not furnished as aforesaid, the Owner may in addition to the Portion of any estimate retained under the preceding provisions of these Contract Documents, also withhold sufficient amount of any payment otherwise due to the Contractor to cover:
 - a. Payments that may be past due or payable for just claims for labor or materials furnished in an about the performance of the work or for damages sustained under this Contract;
 - b. For defective work not remedied as hereinbefore provided, and;
 - c. For failure of the Contractor to make proper payments to his Subcontractors.

If the Contractor fails to carry on the work within the time set out in his Proposal, the Owner may retain from the moneys that are, or which may become due said Contractor, the Owner's estimated daily cost of the completed work, for each and every calendar day the completion of the work be delayed beyond the time specified herein for such completion. The Contractor shall not be entitled to a bonus for early completion.

- 43. The Right of Owner to Terminate Contract: In the event that any of the provisions of these Contract Documents are violated by the Contractor or any of his/her Subcontractors, the Owner may serve written notice upon the Contractor and the Surety, of his intention to terminate such Contract, such notices to contain the reasons for such intention to terminate the Contract, and unless within ten (10) days after the serving of such notice upon the Contractor such violation shall cease and satisfactory arrangements for corrections be made, the Contract shall, upon the expiration of said ten (10) days cease and terminate. In the event of any termination, the Owner shall immediately serve notice thereof upon the Surety and the Contractor, and the Surety shall have the right to take over and perform the Contract, provided, however, that if the Surety does not commence performance thereof within thirty (30) days from the date of the mailing of such Surety or Notice of Termination, the Owner may take over the work and prosecute same to completion by contract for the amount and at the expense of the Contractor, and the Contractor and his Surety shall be liable to the Owner for any excess cost occasioned the Owner thereby, and in such event the Owner may take possession of and utilize in completing the work, such appliances and shop drawings as may be on the site of the work and necessary therefore.
- 44. Other Contacts: The Owner reserves the right to allow other work or to enter into other Contracts for work to be constructed or placed in or about the work herein described, and to order the starting and progress of such other Contracts at any time prior to the completion of this Contract. The Contractor hereby waives any claims for damages or extra compensation by reason of any real or supposed interference with his work.
- 45. **Suspension of Work:** The Owner reserves the right to suspend the whole or any part of the work to be done hereunder if work is not proceeding in accordance with the Contract Documents, without compensation to the Contractor for such suspension other than extending

the time for completing the work as much as it may have been delayed by such suspension. Such suspension shall be in the form of a written "Stop Order" issued by the Owner.

46. **Retainer:** In accordance with ORC Section 153.12 partial payments to the Contractor for labor performed under either a unit or lump sum price contract shall be made at the rate of ninety-two per cent of the estimates prepared by the Contractor and approved by the Engineer. All labor performed after the job is fifty per cent completed shall be paid for at the rate of one hundred per cent of the estimates submitted by the Contractor and approved by the Engineer.

When the major portion of the project is substantially completed and occupied, or in use, or otherwise accepted, and there exists no other reason to withhold retainage, the retained percentages held in connection with such portion shall be released and paid to the contractor, withholding only that amount necessary to assure completion.

- 47. **Final Inspection**: Owner shall make a final inspection upon completion of work; and if all the work required to be done under the Contract is found acceptable as required by the Contract Documents, he shall prepare and provide the Contractor a written statement indicating completion of all the work under the Contract.
- 48. **Final Estimate:** The Owner will pay to the Contractor the total earned compensation as stated in the Final Estimate, less all prior payments. All prior estimates and payments, including those relating to "Changes in Work" or "Ext a Work" shall be subject to correction by this Final Estimate for payment of the work included under these Contract Documents. The one (1) year guarantee period shall commence on the date of the Final Estimate. Final payment will not be released until a written waiver of liens is signed and submitted by all subcontractors and material suppliers.
- 49. The Engineer's Opinion of Probable Construction Cost is \$275,000.00.
- 50. STATEMENT: Do not submit confidential documents or documents of any type that contain trade secrets. All materials submitted become public records once opened and may be copied upon request to anybody including competitive bidders.

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SECTION 00220 - NONCOLLUSION AFFIDAVIT

State of	
BID Identification	
president, secretary, etc.) of	
	pository, or to any member or agent thereof, or to or persons who have a partnership or other financial siness.
	Signed:
	Subscribed and sworn to before me this day of, 2019.
	Seal of Notary

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SECTION 00240 - BONDING AND INSURANCE REQUIREMENTS

A state or local unit of government receiving a grant from the federal government which requires contracting for construction of facility improvement shall follow its own requirements relating to bid guarantees, performance bonds, and payment bonds, except for contracts or subcontracts exceeding \$100,000. For contracts or subcontracts exceeding \$100,000, the Federal agency may accept the bonding policy and requirements of the grantee provided the Federal agency has made a determination that the Government's interest is adequately protected. If such a determination has not been made, the minimum requirements shall be as follows:

- a. A bid guaranty from each bidder. The "bid guaranty" shall consist of a firm commitment such as a bid bond in the amount of one hundred (100) percent of the bid price, or ten (10) percent of the bid price if certified check or other negotiable instrument accompanying a bid, as assurance the bidder will, upon acceptance of his/her bid, execute such contractual documents as may be required within the time specified.
- b. A performance bond on the part of the Contractor for 100 percent of the contract price. A "performance bond" is one executed in connection with a contract to secure fulfillment of all the contractor's obligations under such contract.

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SECTION 00260 - BID GUARANTY AND CONTRACT BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned,
(Insert full name or legal title of Contractor and Address)
as Principal and
(Insert full name or legal title of Surety)
as Surety, are hereby held and firmly bound unto the Warren County Board of Commissioners hereinafter called the Obligee, in the penal sum of the dollar amount of the bid submitted by the Principal to the Obligee on to undertake the project known as:
2019 WELL REDEVELOPMENT PROJECT
The penal sum referred to herein shall be the dollar amount of the Principal's bid to the Obligee, incorporating any additive or deductive alternate proposals made by the Principal on the date referred to above to the Obligee, which are accepted by the Obligee, In no case shall the penal sum exceed the amount of
\$ If this item is left blank, the penal sum will be the full amount of the Principal's bid, including alternates. Alternatively, if completed, the amount stated must not be less than the full amount of the bid, including alternates 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.
THE CONDITION OF THE ABOVE OBLIGATION IS SUCH, that whereas the above named Principal has submitted a bid on the above referred to project;
NOW, THEREFORE, if the 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

NOW, THEREFORE, if the 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 the difference not to exceed ten percent of the penalty hereof between the amount specified in the bid and such larger amount for which the 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 does not award the contract to the next lowest bidder and resubmits the project for bidding, the Principal will pay the Obligee the difference not to exceed ten percent 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 accepts the bid of the Principal and within TEN 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; and

IF THE SAID PRINCIPAL SHALL well and faithfully perform each and every condition of such contract; and indemnify the Obligee against all damage suffered by failure to perform such contract according to the provisions thereof and in accordance with the plans, details, specifications, and bills of material therefore; and shall pay all lawful claims of subcontractors, materialmen, 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 benefit of any materialman or laborer having a just claim, as well as for the 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 said contract or in or to the plans and specifications therefor shall in any wise affect the obligations of said surety on its bond, and it does hereby waive notice of any such modifications, omissions or additions to the terms of the contract or to the work or to the specifications.

2019

day of

SIGNED AND SEALED this

PRINCIPAL		SURETY
y:	By:	
		Attorney-in-fact
itle:	_	
		Surety Agent's Name and Address:

SECTION 00280 - PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS: that
(Name of Contractor)
(Address of Contractor)
a, hereinafter called
(Corporation, Partnership or Individual)
Principal, and
(Name of Surety)
(Address of Surety)
hereinafter called Surety, are held and firmly bound unto
WARREN COUNTY OHIO, BOARD OF COMMISSIONERS 406 Justice Drive Lebanon, OH 45036
hereinafter called OWNER, in the penal sum of Dollars, \$() in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, successors, and assigns, jointly and severally, firmly by these presents.
THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the OWNER, dated the day of, 2019, a copy of which is hereto attached and made a part hereof for the construction of:

2019 WELL REDEVELOPMENT PROJECT

NOW, THEREFORE, if the Principal shall well, truly and faithfully perform its duties, all the undertakings, covenants, terms, conditions, and agreements of said contract during the original term thereof, and any extensions thereof which may be granted by the OWNER, with or without notice to the Surety and during the guaranty period(s), and if he shall satisfy all claims and demands incurred under such contract, and shall fully indemnify and save harmless the OWNER from all costs and damages which it may suffer by reason of failure to do so, and shall reimburse and repay the OWNER all outlay and expense which the OWNER may incur in making good any default, then this obligation shall be void; otherwise to remain in full force and effect.

PROVIDED, FURTHER, that the said surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition of the terms of the contract or the WORK to be performed thereunder or the SPECIFICATIONS accompanying the same shall in any way affect its obligation on this BOND, and it does hereby waive notice of any such change,

extension of time, alteration or addition to the terms of the contract or to the WORK or to the SPECIFICATIONS.

PROVIDED, FURTHER, that no final settlement between the OWNER and the CONTRACTOR shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in counterparts, each one of which shall be deemed an original, this the ______ day of ______ 2019.

ATTEST: _______ (Principal)

By _______

ATTEST: _______ (SEAL) _______ (SURELY)

IMPORTANT: Pursuant to Ohio Revised Code §122.87(A) defines surety company as, "... a company that is authorized by the department of insurance to issue bonds as a surety".

SECTION 00300 - EXPERIENCE STATEMENT

The Bidder is required to state in detail in the space provided below, what work he has done of a character similar to that included in the proposed contract, to give references and such other detailed information as will enable the Owner to judge of his responsibility, experience, skill and financial standing. Completion of this statement is required and must be submitted with the Bid in order to qualify for consideration for award of contract.

CT	ID.	N AT	רידיו	CDD	EOD	
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2019 WELL REDEVELOPMENT PROJECT

SUB]	MITTED BY:
Name	:
	(Print or Type Name of Bidder) (A Corporation/A Partnership/An Individual) [Bidder to strike out inapplicable terms.]
Addr	ess:
	ndersigned certifies under oath the truth and correctness of all statements and of all ers to questions made hereinafter.
	(Note: Attach Separate Sheets as Required)
1.0	How many years has your organization been in business as a contractor?
2.0	How many years has your organization been in business under its present name?
3.0	Has any construction contracts to which you have been a party been terminated by the owner; have you ever terminated work on a project prior to its completion for any reason has any surety which issued a performance bond on your behalf ever completed the work in its own name or financed such completion on your behalf; has any surety expended any monies in connection with a contract for which they furnished a bond on your behalf? If the answer to any portion of this question is "yes", please furnish details of all such occur-rences including name, address, phone number, and contact person of owner, architect or engineer, and surety, and name and date of project.
	No, If yes, attach details described above.

4.0	Has any officer or partner of your organization ever been an officer or partner of another organization that had any construction contracts terminated by the owner; terminated work on a project prior to its completion for any reason; had any surety which issued a performance bond complete the work in its own name or financed such completion; or had any surety expend any monies in connection with a contract for which they furnished a bond? If the answer to any portion of this question is "yes", please furnish details of all such occurrences including name, address, phone number, and contact person of owner, architect or engineer, and surety, and name and date of project.
	No, If yes, attach details described above.
5.0	List name of project, owner, contract amount, percent complete and scheduled completion of the major construction projects your organization has in process on this date.
6.0	List name of project, owner, contract amount, date of completion and percent of work with own forces of construction ainting projects of the same general nature as this project which your organization has completed in the past five years.
7.0	Have you personally inspected the site of the proposed work? Describe any anticipated problems with the site and your proposed solutions?
8.0	List name, address and telephone number of a reference for each project listed under Items 5.0 and 6.0, above.
9.0	List name and experience of the principal individuals of your organization.

.0 Li	st the states in which your organization is legally qualified to do business.
	st name, address and telephone number of an individual who represents each of the and whom OWNER may contact for a financial reference:
11	.1 <u>A surety</u> :
	Name
	Contact_
	Address
	Phone No.
	Financial Reference
2 4	
.2 <u>A</u>	bank:
	Name
	Contact
	Address
	Phone No
	Financial Reference
.3 <u>A</u>	major material supplier:
	Name
	Contact
	Address
	Phone No
	Financial Reference

12.0	Dated at	thisday of, 2019.
		(Print or Type Name of Bidder)
		By:
(Seal	if corporation)	
	•	
		(Affidavit for Individual)
 qualif	ication information	, being duly sworn, deposes and says that all of the foregoing is true, complete, and accurate.
		(Affidavit for Partnership)
		, being duly sworn, deposes and says that he/she is a member o
the pa	rtnership of	and that all of the foregoing is true, complete, and accurate.
-		(Affidavit for Corporation)
		, being duly sworn, deposes and says that he/she is
		, and that all of the (Full name of Corporation)
		formation is true, complete, and accurate.
		(Affidavit for Joint Venture)
		and, being duly
sworn	, deposes and say	and, being duly that they are members of
		(Full Name of Joint Venture)
and	that all of the fore	oing qualification information is true, complete, and accurate

	(Acknowledgment)	
	, being duly sworn, o	deposes and says that he/she is
of	; that he/she is duly autho	orized to make the foregoing
(Name of Bidder))	
affidavit and that he/she makes it said corporation.	on behalf of () himself/hers	self; () said partnership; ()
Sworn to before me thisof	=	
		(Notary Public)
My commission expires		
(Seal)		

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SECTION 00320 - AFFIDAVIT OF NON-DELINQUENCY OF REAL AND/OR PERSONAL PROPERTY TAX

THIS SECTION SHOULD BE FULLY COMPLETED WHETHER OR NOT YOU AS A VENDOR/CONTRACTOR OWN PROPERTY IN WARREN COUNTY, OHIO.

STATE OF			
COUNTY OF		SS:	
		being o	duly cautioned and sworn, states
as follows:			
1. That he is	(T	itle)	of
	(Name of	Contracting Part	ty)
	(Name of Contractor Personal property	cting Party)	ot presently charged with any eneral tax list of Real and/or
	-OR-		
1. That(Name	of Contracting Pa	is charg	ged with delinquent Real and/or
	of delinquent Real l unpaid penalty ar	and/or Personal and interest is:	or Personal property of Warren property tax due and unpaid
Further, affiant states not.			
		Affiant	
Sworn to and subscribed in n	ny presence this	day of	2019.
		Notary Pub	olic
This instrument was prepared	l by		_•

<u>Note to Fiscal Office</u>: If any Real and/or Personal property taxes are delinquent, you must send a copy of this statement to the County Treasurer within 30 days of the date it is submitted.

WARNING: MAKING A FALSE STATEMENT ON THIS AFFIDAVIT MAY BE PUNISHABLE BY A FINE AND/OR IMPRISONMENT.

SECTION 00340 - EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS, BID CONDITIONS, NON-DISCRIMINATION, AND EQUAL EMPLOYMENT OPPORTUNITY AFFIDAVIT

CERTIFICATE OF COMPLIANCE FOR EEO PURPOSES: (This section applies only to those projects that are funded by Federal and State monies)

All bidders on the project shall submit together with their bid, a copy of a valid Certificate of Compliance for Equal Employment Opportunity purposes contained herein.

A copy of the Certificate of Compliance is enclosed with this bid response?
Yes No
BIDDER'S EEO COVENANTS:

Throughout its performance of any contract awarded to it on this project, the bidder agrees to the following covenants:

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

The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

- 2. The contractor will in all solicitations or advertisements for employees placed by or on behalf of the prime contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, national origin, ancestry or sex.
- 3. The contractor agrees to fully cooperate with the County, the State Equal Employment Opportunity Coordinator and with any other official or agency, or the State or Federal government which seeks to eliminate unlawful employment discrimination, and with all other State and Federal efforts to assure equal employment practices under its contract and the contractor shall comply promptly with all requests and directions from the County, the State Equal Opportunity Coordinator and any of the State of Ohio officials and agencies in this regard, both before and during construction.
- 4. Full cooperation as expressed in clause (3), above, shall include, but not be limited to, being a witness and permitting employees to be witnesses and complainants in any proceedings involving questions of unlawful employment practices, furnishing all information requested by the County and the State Equal Employment Opportunity Coordinator, and permitting access to its books, records, and accounts by the County and the State Equal Employment

Opportunity Coordinator for purposes of investigation to ascertain compliance with applicable rules, regulations and orders.

5. In the event of the contractor's noncompliance with the nondiscrimination clauses of its contract or with any of the said rules, regulations, or orders, its contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further County construction contracts.

In the event that is contract is terminated for a material breach of EEO requirements, the contractor shall become liable for any and all damages which shall accrue to the County as a result of said breach.

6. The contractor will require the inclusion of language reflecting these same six covenants within every subcontract or purchase order it executes in the performance of its contract unless exempted by rules, regulations or orders of the State Equal Employment Opportunity Coordinator so that these provisions will be binding upon each subcontractor or vendor. The contractor will take such as the County may direct as a means of enforcing such provisions, including sanctions for noncompliance; provided, however, that in any litigation with a subcontractor, vendor or other party as a result of such direction by the County, the contractor may be requested to protect the interests of the County.

The	bidder	hereby	adopts	the	forego	ing co	ovenar	its?
	_ Yes		No					

PLEASE NOTE: The bidder's failure to adopt the Bidder's EEO Covenants, and complete the foregoing certification will cause the bidder's proposal to be rejected as being non-responsive.

CERTIFICATE OF COMPLIANCE NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY AFFIDAVIT (CONTRACTOR)

STATE OF)	
COUNTY OF	SS:)	
being	first duly sworn, deposes and	
says that he c	of	
the party who made the foregoing proposal discriminate against any employee or appl sex, or national origin. If awarded the bid affirmative action to insure that applicants employment, without regard to their race, the lowest and best bidder under the foregonotices in conspicuous places available to the provisions of this affidavit.	icant for employment because of rac and contract under this proposal, sa are employed and that employees a religion, color, sex, or national origi- oing proposal, this party shall post n	ce, religion, color, id party shall take re treated, during in. If successful as non-discrimination
Furthermore, said party agrees to abide by Revised Code in the Contract Provisions withe Owner.		
	Signature	
	Affiant	
	Company/Corporation	
	Address	
	City/State/Zip Code	
Sworn to and subscribed before me this	day of, 2019.	
(seal)	Notary	

CERTIFICATE OF COMPLIANCE NON-DISCRIMINATION AND EQUAL EMPLOYMENT OPPORTUNITY AFFIDAVIT (SUB CONTRACTOR)

STATE OF)
COUNTY OF	SS:)
being	first duly sworn, deposes and
says that he	of
discriminate against any employee or appl sex, or national origin. If awarded the bid affirmative action to insure that applicants employment, without regard to their race, the lowest and best bidder under the forego	l; that such party as bidder does not and shall not icant for employment because of race, religion, color, and contract under this proposal, said party shall take are employed and that employees are treated, during religion, color, sex, or national origin. If successful as oing proposal, this party shall post non-discrimination employees and applicants for employment setting forth
- · · · · · · · · · · · · · · · · · · ·	the assurances found in Section 153.54 of the Ohio with the Owner if selected as the successful bidder by
	Signature
	Affiant
	Company/Corporation
	Address
	City/State/Zip Code
Sworn to and subscribed before me this	day of, 2019.
(seal)	Notary

SECTION 00360 - FINDINGS FOR RECOVERY AFFIDAVIT

STAT	E OF			
COUN	VTY OF, S	S:		
follow	, u ring based on personal knowledge	pon being duly o	cautioned and swor	n, hereby states the
	That he/she is of bidder) and authorized to execute			
2)	That against whom a finding for recording for recovery is unresolved Section 9.24 (B); and,	very has been iss	sued by the Auditor	of State, which
3)	Thatdatabase of unresolved findings to Ohio Revised Code [General			not appear in the itor of State pursuant
	Sworn to and subscribed in my p		iant day of	, 2019.
Му Со	ommission expires:	Not	tary Public	

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SECTION 00400 – CONTRACT

SECTION 00400 - CONTRACT

THIS AGREEMENT, made this ______ day of ______, 2019, with the Warren County Board of Commissioners, 406 Justice Drive, Lebanon, Ohio, hereinafter called "Owner" and **CONTRACTOR NAME AND ADDRESS HERE** doing businesses as (an individual, partner, a corporation) hereinafter called "Contractor."

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned, to be made and performed by the Owner, the Contractor hereby agrees with the Owner to commence and complete the construction described as follows:

2019 WELL REDEVELOPMENT PROJECT

hereinafter called the project, for the sum of \$AMOUNT AND WRITE IT OUT HERE, and all work in connection therewith, under the terms as stated in the Conditions of the Contract; and as his (its or their) own proper cost and expense furnish all the materials, supplies, machinery, equipment, tools, superintendence, labor insurance, and other accessories and services necessary to complete the said project in accordance with the conditions and prices stated in the Proposal, Conditions of the Contract, the Specifications and Contract Documents. "Contract Documents" means and includes the following:

ADDENDUMS

VOLUME I

SECTION 00040 - INVITATION TO BIDDERS

SECTION 00100 - BID PROPOSAL

SECTION 00120 - EXCEPTION SHEET

SECTION 00130 - BIDDER IDENTIFICATION

SECTION 00200 - GENERAL INSTRUCTIONS TO BIDDERS

SECTION 00220 - NONCOLLUSION AFFIDAVIT

SECTION 00240 - BONDING AND INSURANCE REQUIREMENTS

SECTION 00260 - BID GUARANTY AND CONTRACT BOND

SECTION 00280 - PERFORMANCE BOND

SECTION 00300 - EXPERIENCE STATEMENT

SECTION 00320 - AFFIDAVIT OF NON-DELINQUENCY OF REAL AND/OR PERSONAL PROPERTY TAX

SECTION 00340 - EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS, BID CONDITIONS, NON-DISCRIMINATION, AND EQUAL EMPLOYMENT OPPORTUNITY AFFIDAVIT

SECTION 00360 - FINDINGS FOR RECOVERY AFFIDAVIT

SECTION 00400 - CONTRACT

SECTION 00500 - WAGE RATE DETERMINATION

SECTION 00700 - GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

SECTION 00730 - TECHNICAL SPECIFICATIONS

CONTRACTOR hereby agrees to commence work under this contract on or before a date to be specified in a Written "Notice to Proceed" of the OWNER and shall complete all work within the following requirements:

- a. Substantial completion shall be within 180 days from Notice to Proceed.
- b. Final completion, site restoration work complete, and Contract Closeout shall be within 210 days from Notice to Proceed.

Contractor also agrees to pay as liquidated damages, the sum of \$200.00 for each consecutive calendar day thereafter.

This Agreement may be terminated by either party upon written notice in the event of substantial failure by the other party to perform in accordance with the terms of this Agreement. The nonperforming party shall have fifteen calendar days from the date of the termination notice to cure or to submit a plan for cure acceptable to the other party.

OWNER may terminate or suspend performance of this Agreement for OWNER'S convenience upon written notice to the CONTRACTOR. CONTRACTOR shall terminate or suspend performance of the services/work on a schedule acceptable to the OWNER.

The CONTRACTOR will indemnify and save the OWNER, their officers and employees, harmless from loss, expenses, costs, reasonable attorneys fees, litigation expenses, suits at law or in equity, causes of action, actions, damages, and obligations arising from (a) negligent, reckless or willful and wanton acts, errors or omissions by CONTRACTOR, its agents, employees, licensees, consultants, or subconsultants; (b) the failure of the CONTRACTOR, its agents, employees, licensees, consultants or subconsultants to observe the applicable standard of care in providing services pursuant to this agreement; (c) the intentional misconduct of the CONTRACTOR, its agents, employees, licensees, consultants, or subconsultants that result in injury to persons or damage to property for which the OWNER may be held legally liable.

The CONTRACTOR does hereby agree to indemnify and hold the OWNER harmless for any and all sums for which the OWNER may be required to pay or for which the OWNER may be held responsible for failure of the CONTRACTOR or any subcontractors to pay the prevailing wage upon this project.

The OWNER agrees to pay the CONTRACTOR in the manner and at such times as set forth in the General Provisions such amounts as required by the Contract Documents.

This Contract shall be construed under the laws of the State of Ohio, and the parties hereby stipulate to the venue for any and all claims, disputes, interpretations, litigation of any kind arising out of this Contract being exclusively in the Warren County, Ohio Court of Common Pleas (unless both parties mutually agree in writing to alternate dispute resolution), as well as waiving any right to bring or remove such matters in or to any other state or federal court.

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

Contractor shall bind every subcontractor to, and every subcontractor must agree to be bound by the terms of, this Agreement, as far as applicable to the subcontractor's work particularly pertaining to Prevailing Wages and EEO requirements. Nothing contained in this Agreement shall create any contractual relationship between any subcontractor and Owner, nor create any obligations on the part of the Owner to pay or see to the payment of any sums to any subcontractor.

IN WITNESS WHEREOF, the parties hereto have executed, or caused to be executed by their duly authorized officials, this Agreement in two counterparts, each of which shall be deemed an original on the date first above written.

	WARREN COUNTY BOARD OF COMMISSION (Owner)	ONERS
	Shannon Jones, President	
ATTEST:		
	David G. Young	
Name	Tom Grossmann	
(Seal)		
ATTEST:	CONTRACTOR NAME HERE (Contractor)	
	By: Name	
	Title	
Approved as to Form:		
Assistant Prosecutor		

SECTION 00500 - WAGE RATE DETERMINATION

PART 1 GENERAL

1.01 PREVAILING WAGES

Prevailing wage rates for the State of Ohio apply to this project. Contractors and Subcontractor(s) shall conform to the State of Ohio Department of Labor requirements, guidelines, and laws. Included in this section is a list of the Ohio Prevailing Wage Rates available at the time of publication. It is the responsibility of the Contractor and Subcontractor(s) to verify the wage rates prior to bidding and throughout the project. A complete list of Ohio Prevailing Wage Rates is available at the Ohio Wage and Hour website or from the Ohio Department of Commerce Wage and Hour Bureau.

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Mike DeWine Governor

Sheryl Maxfield Director

PREVAILING WAGE GUIDE

WARREN COUNTY (UPDATED OCTOBER 4, 2019)

OHIO DEPARTMENT OF COMMERCE

Division of Industrial Compliance Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239

> Fax: 614-728-8639 www.com.ohio.gov TTY/TDD: 1-800-750-0750

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This packet of information is provided as a summary of the Prevailing Wage guidelines and responsibilities. The Ohio Revised Code, Chapter 4115 should be referred to for the exact wording of the law. Also included are references and forms which should be helpful in the compliance of the Prevailing Wage Law.

PACKET INFORMATION INDEX

A. The Ohio Department of Commerce-Division of Industrial Compliance, Wage and Hour Administration Investigators and their assigned counties

- 1. The Wage and Hour Investigators for the State of Ohio are listed with their contact information.
 - a. If you have questions or need assistance pertaining to Prevailing Wage, you can contact the Investigator in your area.

B. Prevailing Wage Guide for Public Authorities

- 1. Notice of change of the Prevailing Wage Threshold Level.
 - a. A notification will be sent to you when there is a change of the Prevailing Wage threshold level
- 2. Outline of the Public Authority's responsibilities for Prevailing Wage.
- 3. Public Authority's Compliance Checklist form.
 - a. A form for tracking the progress of a Prevailing Wage project
- 4. Request form for Prevailing Wage Rates.
 - a. Prevailing Wage Rates can be obtained on the website www.com.ohio.gov
 - (1) Prevailing Wage Determination Schedule of wages must be attached to and made part of the specifications for the project, and must be printed on the bidding blanks where the work is done by contract.
- 5. Bid Tabulation form
 - A form to be completed and returned to ODOC-DIC-Bureau of Wage and Hour Administration when the contract has been awarded.
- 6. Prevailing Wage Bonds form
 - a. Information needed to be kept on file by the Prevailing Wage Coordinator when bonds from the Public Authority are used for a project.

C. Prevailing Wage Guidelines for the Public Authority's Coordinator

- 1. Guideline for the Prevailing Wage Coordinator
 - a. The Prevailing Wage complaint form and instructions can be obtained on the website www.com.ohio.gov
- 2. Record of the Certified Payroll Reports Received form
 - a. Helpful form for recording the Certified Payroll Reports and the dates received from the contractors and subcontractors.
- 3. Employee Interview form
 - a. Helpful form for the use by the Prevailing Wage Coordinator when making on-site visits.
- 4. Employee vs. Independent Contractor
 - a. Helpful questions when determining if a person is an Employee or an Independent Contractor.

D. Prevailing Wage Guide for Contractors

(Incorporate this section in the Specifications or supply copies for the pre-construction meeting.)

- 1. Outline of responsibilities for the Prevailing Wage Contractor
- 2. Notification form from the Contractor to the Employee
 - a. The contractor must submit to employees a completed and signed notification form.
 - b. Some Prevailing Wage Coordinators may require a copy of the completed Notification to the Employee form be submitted with the Certified Payroll Reports.
- 3. Certified Payroll Report form
 - a. The contractor can use any form/format he chooses as long as *ALL* the information has been provided.
- 4. Certified Payroll Report form instruction sheet
- 5. Corrected Certified Payroll Report Example
- 6. Affidavit of Compliance form
 - a. No Public Authority shall make final payment unless the **Final Affidavits** have been filed by the contractors and subcontractors.

Prevailing Wage Determination Cover Letter

County: WARREN >
Determination Date: 10/04/2019
Expiration Date: 01/04/2020

THE FOLLOWING PAGES ARE PREVAILING RATES OF WAGES ON PUBLIC IMPROVEMENTS FAIRLY ESTIMATED TO BE MORE THAN THE AMOUNT IN O.R.C. SEC. 4115.03 (b) (1) or (2), AS APPLICABLE.

Section 4115.05 provides, in part: "Where contracts are not awarded or construction undertaken within ninety days from the date of the establishment of the prevailing wages, there shall be a redetermination of the prevailing rate of wages before the contract is awarded." The expiration date of this wage schedule is listed above for your convenience only. This wage determination is not intended as a blanket determination to be used for all projects during this period without prior approval of this Department.

Section 4115.04, Ohio Revised Code provides, in part: "Such schedule of wages shall be attached to and made a part of the specifications for the work, and shall be printed on the bidding blanks where the work is done by contract..."

The contract between the letting authority and the successful bidder shall contain a statement requiring that mechanics and laborers be paid a prevailing rate of wage as required in Section 4115.06, Ohio Revised Code.

The contractor or subcontractor is required to file with the contracting public authority upon completion of the project and prior to final payment therefore an affidavit stating that he has fully complied with Chapter 4115 of the Ohio Revised Code.

The wage rates contained in this schedule are the "Prevailing Wages" as defined by Section 4115.03, Ohio Revised Code (the basic hourly rates plus certain fringe benefits). These rates and fringes shall be a minimum to be paid under a contract regulated by Chapter 4115 of the Ohio Revised Code by contractors and subcontractors. The prevailing wage rates contained in this schedule include the effective dates and wage rates currently on file. In cases where future effective dates are not included in this schedule, modifications to the wage schedule will be furnished to the Prevailing Wage Coordinator appointed by the public authority as soon as prevailing wage rates increases are received by this office.

"There shall be posted in a prominent and accessible place on the site of work a legible statement of the Schedule of Wage Rates specified in the contract to the various classifications of laborers, workmen, and mechanics employed, said statement to remain posted during the life of such contract." Section 4115.07, Ohio Revised Code.

Apprentices will be permitted to work only under a bona fide apprenticeship program if such program exists and if such program is registered with the Ohio Apprenticeship Council.

Section 4115.071 provides that no later than ten days before the first payment of wages is due to any employee of any contractor or subcontractor working on a contract regulated by Chapter 4115, Ohio Revised Code, the contracting public authority shall appoint one of his own employees to act as the prevailing wage coordinator for said contract. The duties of the prevailing wage coordinator are outlined in Section 4115.071 of the Ohio Revised Code.

Section 4115.05 provides for an escalator in the prevailing wage rate. Each time a new rate is established, that rate is required to be paid on all ongoing public improvement projects.

A further requirement of Section 4115.05 of the Ohio Revised Code is: "On the occasion of the first pay date under a contract, the contractor shall furnish each employee not covered by a collective bargaining agreement or understanding between employers and bona fide organizations of Labor with individual written notification of the job classification to which the employee is assigned, the prevailing wage determined to be applicable to that classification, separated into the hourly rate of pay and the fringe payments, and the identity of the prevailing wage Coordinator appointed by the public authority. The contractor or subcontractor shall furnish the same notification to each affected employee every time the job classification of the employee is changed."

Work performed in connection with the installation of modular furniture may be subject to prevailing wage.

THIS PACKET IS NOT TO BE SEPARATED BUT IS TO REMAIN COMPLETE AS IT IS SUBMITTED TO YOU. (Reference guidelines and forms are included in this packet to be helpful in the compliance of the Prevailing Wage law.)
wh1500



Mike DeWine Governor

Sheryl Maxfield Director

INVESTIGATORS CONTACT INFORMATION

OHIO DEPARTMENT OF COMMERCE

Division of Industrial Compliance Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239

> Fax: 614-728-8639 www.com.ohio.gov TTY/TDD: 1-800-750-0750

The Ohio Department of Commerce is an Equal Opportunity Employer and Service Provider

OHIO DEPARTMENT OF COMMERCE **Division of Industrial Compliance Bureau of Wage and Hour Administration** Chief, Stephen Clegg

6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 614-644-2239 fax: 614-728-8639 http://www.com.ohio.gov

INVESTIGATORS and THEIR HEADQUARTER COUNTY

#40 B 11 4	
#48 Dave Horvath	Allen *
PO Box 1512	
Lima, Ohio 45802-1512	
Voice: (419) 302-1200	
Fax: (614) 728-8639	
Dave.Horvath@com.state.oh.us	
#30 Mike McKee	Guernsey*
P.O. Box 1342	
Cambridge, Ohio 43725-2247	
Voice/Fax: (740) 432-1987	
Michael.McKee@com.state.oh.us	
#56 Shawn Miles	2
P.O. Box 2547	Stark *
North Canton, Ohio 44720	
Voice/Fax: (614) 496-9076	
Shawn.Miles@com.state.oh.us	
Onawiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii	
#37 David Rice	Montgomery *
P.O. Box 41241	Workgomery
Dayton, Ohio 45441	
Voice: (740) 502-0883	
Fax: (614) 995-7768	
Dave.Rice@com.state.oh.us	
#35 Sean Seibert	Lake *
P.O. Box 422	
Painesville, Ohio 44077-3938	
Voice: (614) 557-8662	
Fax: (614) 232-9541	
Sean.Seibert@com.state.oh.us	
#11 Kela D. Thompson	For J.P. 4
6606 Tussing Rd, PO Box 4009	Franklin *
Reynoldsburg, Ohio 43068-9009	
Voice: (614) 728-5007	
Fax: (614) 723-3007	
Kela.Thompson@com.state.oh.us	
* Headquarter County	
ricadquarter County	

Stephen Clegg, Chief 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Voice: (614) 728-8686 Fax: (614) 728-8639 Stephen.Clegg@com.state.oh.us	#90 Jackie Clark, Supervisor 6606 Tussing Rd, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Voice: (614) 728-5019 Fax: (614) 222-2357 Jackie.Clark@com.state.oh.us
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Mike DeWine Governor

Sheryl Maxfield Director

PREVAILING WAGE GUIDE FOR PUBLIC AUTHORITIES

OHIO DEPARTMENT OF COMMERCE

Division of Industrial Compliance Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239

> Fax: 614-728-8639 www.com.ohio.gov TTY/TDD: 1-800-750-0750

The Ohio Department of Commerce is an Equal Opportunity Employer and Service Provider



PREVAILING WAGE THRESHOLD LEVELS IMPORTANT NOTICE

Before advertising for bids, contracting, or undertaking construction with its own forces, to construct a public improvement, the Public Authority shall have the Ohio Department of Commerce-Division of Industrial Compliance, Bureau of Wage and Hour Administration determine the prevailing rates of wages for workers employed on the public improvement. The wage determination must be included in the project specifications and printed on the bidding blanks where work is done by contract.

"New" construction threshold for <i>Building</i> Construction:	\$250,000
"Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting" threshold level for <i>Building</i> Construction:	\$75,000
As of January 1, 2018:	
"New" construction that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction threshold level has been adjusted to:	
"Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting" that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction threshold level has been adjusted to:	\$27,309

- A) Thresholds are to be adjusted biennially by the Director of the Ohio Department of Commerce.
- B) Biennial adjustments to threshold levels are made according to the Building Cost for Skilled Labor Index published by McGraw-Hill's Engineering News-Record, but may not increase or decrease more than 3% for any year.

If there are questions concerning this notification, please contact:

Ohio Department of Commerce Division of Industrial Compliance Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239

Fax: 614-728-8639 www.com.ohio.gov

Public Authority Responsibilities ORC Chapter 4115: Wages and Hours on Public Works (Prevailing Wage Coordinator)

- 1. Before advertising for bids, contracting, or undertaking construction with its own forces, to construct a public improvement, the public authority shall have the Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration determine the prevailing rates of wages for workers employed on the public improvement. The wage determination must be included in the project specifications and printed on the bidding blanks where work is done by contract.
 - a) "New" construction has a threshold level of \$250,000.
 - b) "Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting" has a threshold level of \$75,000.
 - c) "New" construction that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction has a threshold level of **\$84,314**.
 - d) "Reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting" that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction has a threshold of \$25,261.
 - i.) Thresholds are to be adjusted biennially by the Director of Ohio Department of Commerce, Division of Industrial Compliance, Bureau of Wage and Hour Administration.
 - ii.) Biennial adjustments to threshold levels are made according to the Price Deflator for Construction Index, United States Department of Commerce, Bureau of the Census, but may not increase or decrease more than 3% for any year.
- 2. Every contract for public work shall contain a provision that each worker employed by the contractor or subcontractor, or other person about or upon the public work, must be paid the prevailing rate of wages.
- 3. If contracts are not awarded or construction undertaken within ninety days (90) from the date of the determination of the prevailing wage there shall be a re-determination of the wage rates before the contract is awarded.
- 4. Within **seven** (7) **working days** after the receipt of notification of a change in the prevailing wage rates, the public authority shall notify all affected contractors and subcontractors. If it is determined that a contractor or subcontractor has violated sections 4115.03 to 4115.16 of the Ohio Revised Code because they were not notified as required, **the public authority is liable** for any back wages, fines, damages, court costs and attorney's fees for the period of time covering the receipt of wage changes, until they give the required notice.
- 5. No public authority shall award a contract for a public improvement to any contractor or subcontractor whose name appears on the list of debarred contractors. This list is filed with the Secretary of State by the Ohio Department of Commerce-Division of Industrial Compliance & Labor-Bureau of Wage and Hour Administration The filing of the notice of conviction with the secretary of state constitutes notice to all public authorities. These contractors are prohibited from working on public improvements for periods ranging from one to three years. The list of debarred contractors can be located on the website www.com.ohio.gov/laws
- 6. A public authority must designate and appoint **one of its own employees** to serve as the Prevailing Wage Coordinator during the life of the contract for constructing the public improvement. A Prevailing Wage Coordinator must be appointed no later than ten days before the first payment of wages by contractors to employees working on the public improvement.

PUBLIC AUTHORITY'S COMPLIANCE CHECKLIST FOR PREVAILING WAGE

Project:	Number:							
Department:	Phone#:							
PW Coordinator:	PW Coordinator:							
Architect/Engineer:			Phone#:					
Contractor:			Phone#:					
Contact Person:			Title:					
General Contractor:		Prime Contractor:	Construction Mgr:					
Date Completed		Compliance Item Desc						
	1.	Request Prevailing Wage Determination Schedu	le from ODOC-DIC-Wage &					
		Hour	Ç					
	2.	Received Prevailing Wage Determination So	hedule					
	3.	Incorporate Determination Schedule in Spec	s./Bidding Blanks					
	4.	Incorporate notice of Prevailing Wage requirement	ents in Invitation for Bids/Notice					
		to Bidders						
	5.	Incorporate Prevailing Wage requirements in	Contract					
	6.	Submit complete Invitation for Bid to ODO	C-DIC-Wage & Hour					
	7.	Invitation for Bids						
	8.	Bid Opening						
	9.	Check Listing of Violators						
	10.	Award of Contract. (see note)						
	11.	Submit Bid Tabulation/Award to ODOC-DI	C-WAGE & HOUR					
	12.	Notice to Successful Bidder						
	13.	Work Commenced(see note)						
	14.	Appoint Prevailing Wage Coordinator						
	15.	Received list of Subcontractors' names, addr	resses, phone #'s & email's					
	16.	Received Payroll Date Schedule	•					
	17.	Received Registered Apprenticeship Agreen	nent Certifications					
	18.	Received Deduction Agreements						
	19.	Received Payroll Reports with Certification.	(see attachment)					
	20.	Visited project site	,					
	21.	Received Changes to Determination Schedul	le					
	22.	Notice to Contractors of Determination Sche						
	23.	Request Final Compliance Affidavit from co						
	24.	Received Final Affidavits from all contracto						
	25.	Certify Final Payment						

Note: If contract is not awarded or construction undertaken within 90 days from the date of establishment of the Prevailing Wage Rates, a re-determination of the Prevailing Wage Rates is required.

REG	LING WAGE RATES		
Date		(Mark (X) One) - Residential	~ Construction
Project Information (only one County of Project	Project and one of	county per request form please)	This form MUST be filled out COMPETELY
County of Froject	Floject	Name	& CORRECTLY for us to process your
Site Address	City		request. Forms not completed correctly will be RETURNED TO THE SENDER.
Owner/Public Authority			Prevailing Wage Rates can be obtained on the website www.com.ohio.gov
Address	Telephor	ne Number	ODOC-DIC-WAGE & HOUR DATE STAMP
City	Zip Code		
PW Coordinator	Telephor	ne Number	
Issuing Authority of Bonds	Type of l	Financing	
Estimated Total Overall Projec	t Cost		
New Construction A copy of this form will be re that copy to us with your bid to Expected Date of Contract Av	tabulations once t	PLEASE MAIL THIS REQUEST TO: Ohio Department of Commerce Division of Industrial Compliance Bureau of Wage & Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 PHONE: (614) 644-2239 FAX: (614) 728-8639	
Projected Completion Date			FAA: (014) /26-8039
Send Wage Rates to: (contracto	ors are charged \$4	5.00 per county)	ODOC-DIC-W&H DATE STAMP (bid tab)
Mail Pick Up Federal Express Account Nu	mber		
Name		Company or Public Authority	
Address			
City Zi	p	Telephone Number	
* "Old" construction is reconst	ruction, enlargen	nent, alteration, repair, remodeling	5,
renovation, or painting.			

BID TABULATION SHEET

Please attach a copy of your original dated and stamped "Request for Prevailing Wage Rates" with this Bid Tabulation. Please check mark which company was awarded the contract for the project.

(Note: DO NOT SEND UNTIL THE CONTRACT HAS BEEN OFFICIALLY AWARDED.)

Ohio Department of Commerce

Division of Industrial Compliance, Bureau of Wage & Hour 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009

(Phone) 614-644-2239, (Fax) 614-728-8639 www.com.ohio.gov

Contracting Public Authority:												
Project Name:												
Pro	Project #: Bid Date: Estimate:											
1												
Cor	Contract Description: General HVAC Electrical Plumbing Asbestos Other:											
AV	AWARDED LIST OF THE BIDDING TOTAL											
(TC CHE				C(ONTRACTOR	S		BID AMOUNT			
]										
		ĺ										
	Т	ĺ										
]										
						SUBMITT	ED BY					
Prir	t Na	me:						Title:				
Tele	pho	ne Nun	nber: ()			FAX #:				
								EMAIL:				
Sign	Signature: Date:											

INDUSTRIAL DEVELOPMENT BONDS

	Bond Projects require the	Public Authorit	y to keep the follow	ing information on file
1.	Type of Bonds issued:		Amount:	
2.	The total cost of the Project:			
3.	The other type of financing involved	in the project:		
4.	Portion of the project being constructed	ed with each type	of financing:	
5.	Are Prevailing Wage Rates being app	lied to all constru	ction on the project:	□Yes□No
	The name of the political subdivision	who issued the bo	onds:	
7.	When were the bonds issued:			
	For what purpose were the bonds issu			
	Who handles the funds once the bond			
10.	Who is the lending institution that pur	chased the bonds	:	
11.	How are the funds to be paid out:			
12.	When are the funds to be paid out:			
13.	Who is the Bond Council:			
14.	Who has been appointed as the Prevai	lling Coordinator:		
PW	C Address:			
Cit	y:	OHIO	Zip:	Telephone #:
15.	Obtain a copy of the inducement and	other official docu	ments for the issuan	ce of the bonds.



Mike DeWine Governor

Sheryl Maxfield Director

PREVAILING WAGE GUIDELINES FOR THE PUBLIC AUTHORITY'S PW COORDINATOR

OHIO DEPARTMENT OF COMMERCE

Division of Industrial Compliance and Labor Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239

Fax: 614-728-8639 www.com.ohio.gov TTY/TDD: 1-800-750-0750

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Prevailing Wage Coordinator Guidelines

For more detailed information please refer to Chapter 4115 of the Ohio Revised Code

- A. Attend any pre-bid and/or pre-construction meetings.
 - To explain the prevailing wage rate requirements.
 - To explain the contractor's responsibilities.
- Set up and maintain files containing all contractors' and subcontractors' payroll reports, B. affidavits, and related documents. These files must be available for public inspection.
- Obtain from each contractor a list of their subcontractors' names, addresses, telephone numbers, C. and email addresses.
- Require each contractor and subcontractor to provide their project dates. This will be used to D. make a time schedule for receiving their certified payrolls.
- E. Obtain from each contractor, the name and address of their Bonding\Surety Company.
- F. Obtain from out-of-state corporations, the name and address of their Statutory Agent. (This agent must be located in the State of Ohio and registered with the Ohio Secretary of State.)
 - Records made in connection with the public improvement must not be removed from the State of Ohio for the period of one year following the completion of the project.
- G. Supply contractors with any changes in the Prevailing Wage Rates.
- Within two weeks after the first pay, obtain a certified payroll report from each contractor. A H. certified report is one that is sworn to and signed by the contractor.
 - 1. If the job will exceed four months, all reports after the initial report can be filed once per month. (The initial report must be filed within two weeks.)
 - 2. If the job will last less than four months, all reports are to be filed weekly after the initial report.
- I. Establish and follow procedures to monitor compliance by contractors and subcontractors.
 - Visit project to verify posting requirements and job classifications.
 - Review certified payroll reports to ensure they are submitted in a timely fashion and complete with the following information for each employee:

 a) Name, current address, and their social security number or last 4 when permitted

 - Classification (must be specific for laborers and operators, including level) b)
 - Hours worked on the project c)
 - d) Hourly rate
 - e)
 - Fringe benefits, if applicable
 Total hours worked for the week (all jobs) f)
 - Gross wages, all deductions, net pay
 - g) Gross wages, all deductions, net pay Compare rates and fringes reported to rates in prevailing wage schedule. 3.
- Upon completion of the project and prior to the final payment, require an affidavit of compliance from each contractor and subcontractor. No public authority shall make final payment to any contractor or subcontractor unless the final affidavits have been filed by the respective J. contractor and subcontractor. (O.R.C. section 4115.07)
- Report any non-compliance to Ohio Department of Commerce, Division of Industrial K. Compliance, Bureau of Wage & Hour Administration. The PW complaint form and instructions can be obtained on the website www.com.ohio.gov.

RECORD OF THE CERTIFIED PAYROLL REPORTS RECEIVED

Project:			Number:	
Contractor:	Phone #:			
			Email:	
General Contractor:	Prime Contractor:	Subcontractor:		
Date work commenced:	Completed:	Final Affidavit:		

Payroll	Payroll Date	Date Received	Payroll	Payroll Date	Date Received
1			33		
2			34		
3			35		
4			36		
5			37		
6			38		
7			39		
8			40		
9			41		
10			42		
11			43		
12			44		
13			45		
14			46		
15			47		
16			48		
17			49		
18			50		
19			51		
20			52		
21			53		
22			54		
23			55		
24			56		
25			57		
26			58		
27			59		
28			60		
29			61		
30			62		
31			63		
32			64		

PREVAILING WAGE INVESTIGATION\EMPLOYEE INTERVIEW

Failure to co	mplete this int	erview form	may red	uce ou	r ability to re	ecover ba	ack wa	ges whi	ch may	be owed to	you.		
Project:										Case #:			
Address:				С	City:	ty:				County:			
Employee Name:								Last 4	4 digits	s of the S	S#:		
Address:				City	:			State	:			Zip:	
Telephone #: (Home)	(Work)			Emai	l:			Best	time to	be reac	hed:		
Another source by which we can co	ntact you.(Sor	meone not livi	ng at yo	ur addr	ress):								
Name:		Relationsh	ip:				Tele	phone	#:				
Contractor's Name:							Tele	phone	#:				
Address:			City	y:			Stat	e:			Zip:		
Date hired: Date	e started on	this projec	ct:		Approxin	nate ho	urs -	Straigl	nt time	:	Overti	me:	
Method of recording hours:	Time C	ard (Called	into c	office	Reco	rded l	by:	Em	ployee		Foreman	1
Did you keep a personal rec	ord of your	hours work	ed on	this p	roject?	Yes [No	Doy	ou ha	ve check	stubs	? Yes	No
Did anyone else keep a pers	onal record	l?∐Yes[No		If yes	, who:							
List your job classification(s)	:					□Journeyman							
List your specific job duties:					List tools	List tools\equipment used:							
Hourly rate of pay for this pro	oject:				Your reg	ular rat	e of p	ay:					
Fringe benefits paid by contraction - Amount ~ Other (list):]None □ Holidays -				urance Life Insurance Pension Bonus Apprenticeship training Profit Sharing							
Did you work overtime?	Yes No	Wer	e hour	s ove	40 per week paid at time and one half? Yes No								
When is your pay day?					Method c	Method of payment: Check Cash Direct Depos				sit			
List names of co-workers on	this project	t:											
Comments:					worked	Please provide a detailed list of the dates, times and hours worked within each classification that may apply to the work performed on a separate sheet.							
SIGNATURE AND NOTARY													
Affiant is further informed that Secti provides a penalty of a misdemean will be pursued of those persons where statement whenthe statement public" Sworn to before me and subscribed in my presence this	or of the first done "knowingly sent is sworn or by the said:	egree and tha swear or affirn affirmed befo	at prosed in the tru re a nota	cution th of a ary	Signatur Return to	re C C C E E 6 F ((Ohio De Division Bureau 1606 Tu Reynolo 614) 64	epartmen of Indu of Wage	nt of Coi strial Co e and Ho load P Ohio 430	mmerce ompliance 8 our Adminis .O. Box 40 068-9009	& Labor	ny knowledge Dat	
Signature of PW Coordinato	r:									Date	•		

EMPLOYEE VS. INDEPENDENT CONTRACTOR

EMPLOYEE	\leftrightarrow	YES	Does the employer have the right to control and direct worker?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Does the worker receive instructions about how and where the work is to be done instead of the employer merely specifying the desired result?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Is payment based on time spent rather than a set price for the work to be performed?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Does the worker devote virtually all his working time to the employer rather than offering services to the general public?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Does the worker performing services make their services available to the general public and/or other businesses?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Is there a continuing relationship between employer and worker?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Can the worker be discharged at will?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Did the employer train the worker for the job?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Does the employer have employees performing the same work as the independent contractor?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR

EMPLOYEE VS. INDEPENDENT CONTRACTOR-continued

EMPLOYEE	\leftrightarrow	YES	Does the worker perform services personally rather than delegating them to others?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Does the employer set a specific time when the individual services are to be performed?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Does the employer furnish the tools and materials used by the worker performing services?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	YES	Is the employer assuming all the financial risk, rather than the worker making a significant financial investment in the job and having the opportunity to realize a profit or loss from the work?	NO	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	NO	Does the individual performing the services publicly advertise these services in for example, the newspaper or yellow pages ?	YES	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	NO	Does the individual performing the services have a business license?	YES	\leftrightarrow	INDEPENDENT CONTRACTOR
EMPLOYEE	\leftrightarrow	NO	Does the individual performing the services operate d.b.a. or under a tradename?	YES	\leftrightarrow	INDEPENDENT CONTRACTOR



Mike DeWine Governor

Sheryl Maxfield Director

PREVAILING WAGE GUIDE FOR CONTRACTORS

OHIO DEPARTMENT OF COMMERCE

Division of Industrial Compliance Bureau of Wage and Hour Administration 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 Phone: 614-644-2239

> Fax: 614-728-8639 www.com.ohio.gov TTY/TDD: 1-800-750-0750

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OHIO DEPARTMENT OF COMMERCE Division of Industrial Compliance Bureau of Wage and Hour Administration Chief, Stephen Clegg 6606 Tussing Road, PO Box 4009 Reynoldsburg, Ohio 43068-9009 614-644-2239 fax: 614-728-8639 http://www.com.ohio.gov

INVESTIGATORS and THEIR HEADQUARTER COUNTY

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Reynoldsburg, Ohio 43068-9009	
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PREVAILING WAGE CONTRACTOR RESPONSIBILITIES

This is a summary of prevailing wage contractors' responsibilities. For more detailed information please refer to Chapter 4115 of the Ohio Revised Code

General Information

Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$250,000 for new construction or \$75,000 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting.

Ohio's prevailing wage laws apply to all public improvements financed in whole or in part by public funds when the total overall project cost is fairly estimated to be more than \$91,150 for new construction that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction or \$27,309 for reconstruction, enlargement, alteration, repair, remodeling, renovation, or painting of a public improvement that involves roads, streets, alleys, sewers, ditches and other works connected to road or bridge construction.

- Thresholds are to be adjusted biennially by the Administrator of Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration
- b) Biennial adjustments to threshold levels are made according to the Price Deflator for Construction Index, United States Department of Commerce, Bureau of the Census*, but may not increase or decrease more than 3% for any year

Penalties for violation

Violators are to be assessed the wages owed, plus a penalty of 100% of the wages owed.

Intentional Violations

If an intentional violation is determined to have occurred, the contractor is prohibited from contracting directly or indirectly with any public authority for the construction of a public improvement. Intentional violation means "a willful, knowing, or deliberate disregard for any provision" of the prevailing wage law and includes but is not limited to the following actions:

- Intentional failure to submit payroll reports as required, or knowingly submitting false or erroneous reports.
- Intentional misclassification of employees for the purpose of reducing wages.
- Intentional misclassification of employees as independent contractors or as apprentices.
- Intentional failure to pay the prevailing wage.
- Intentional failure to comply with the allowable ratio of apprentices to skilled workers as required by the regulations established by Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration.
- Intentionally employing an officer, of a contractor or subcontractor, that is known to be prohibited from contracting, directly or indirectly, with a public authority.



Division of Industrial Compliance

Responsibilities

- A. Pay the prevailing rate of wages as shown in the wage rate schedules issued by the Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration, for the classification of work being performed.
 - 1. Wage rate schedules include all modifications, corrections, escalations, or reductions to wage rates issued for the project.
 - 2. Overtime must be paid at time and one-half the employee's base hourly rate. Fringe benefits are paid at straight time rate for all hours including overtime.
 - 3. Prevailing wages must be paid in full without any deduction for food, lodging, transportation, use of tools, etc.; unless, the employee has voluntarily consented to these deductions in writing. The public authority and the Director of Ohio Department of Commerce, Division of Industrial Compliance and Labor, Bureau of Wage and Hour Administration must approve these deductions as fair and reasonable. Consent and approval must be obtained before starting the project.
- B. Use of Apprentices and Helpers cannot exceed the ratios permitted in the wage rate schedules.
 - 1. Apprentices must be registered with the U.S. Department of Labor Bureau of Apprenticeship and Training.
 - 2. Contractors must provide the Prevailing Wage Coordinator a copy of the Apprenticeship Agreement for each apprentice on the project.
- C. Keep full and accurate payroll records available for inspection by any authorized representative of the Ohio Department of Commerce, Division of Industrial Compliance, and Labor, Bureau of Wage and Hour Administration or the contracting public authority, including the Prevailing Wage Coordinator. Records should include but are not limited to:
 - 1. Time cards, time sheets, daily work records, etc.
 - 2. Payroll ledger\journals and canceled checks\check register.
 - 3. Fringe benefit records must include program, address, account number, & canceled checks.
 - 4. Records made in connection with the public improvement must not be removed from the State for one year following the completion of the project.
 - 5. Out-of-State Corporations must submit to the Ohio Secretary of State the full name and address of their Statutory Agent in Ohio.
- D. Prevailing Wage Rate Schedule must be posted on the job site where it is accessible to all employees.
- E. Prior to submitting the initial payroll report, supply the Prevailing Wage Coordinator with your project dates to schedule reporting of your payrolls.
- F. Supply the Prevailing Wage Coordinator a list of all subcontractors including the name, address, and telephone number for each.
 - 1. Contractors are responsible for their subcontractors' compliance with requirements of Chapter 4115 of the Ohio Revised Code.



Division of Industrial Compliance

- G. Before employees start work on the project, supply them with written notification of their job classification, prevailing wage rate, fringe benefit amounts, and the name of the Prevailing Wage Coordinator for the project. A copy of the completed signed notification should be submitted to Prevailing Wage Coordinator.
- H. Supply all subcontractors with the Prevailing Wage Rates and changes.
- I. Submit certified payrolls within two (2) weeks after the initial pay period. Payrolls must include the following information:
 - 1. Employees' names, addresses, and social security numbers.
 - a. Corporate officers/owners/partners and any salaried personnel who do physical work on the project are considered employees. All rate and reporting requirements are applicable to these individuals.
 - 2. Employees' work classification.
 - a. Be specific about the laborers and/or operators (Group)
 - b. For all apprentices, show level/year and percent of journeyman's rate
 - 3. Hours worked on the project for each employee.
 - a. The number of hours worked in each day and the total number of hours worked each week.
 - 4. Hourly rate for each employee.
 - a. The minimum rate paid must be the wage rate for the appropriate classification. The Department's Wage Rate Schedule sets this rate.
 - b. All overtime worked is to be paid at time and one-half for all hours worked more than forty (40) per week.
 - 5. Where fringes are paid into a bona fide plan instead of cash, list each benefit and amount per hour paid to program for each employee.
 - a. When the amount contributed to the fringe benefit plan and the total number of hours worked by the employee on all projects for the year are documented, the hourly amount is calculated by dividing the total contribution of the employer by the total number of hours worked by the employee.
 - b. When the amount contributed to the fringe benefit is documented but not the total hours worked, the hourly amount is calculated by **dividing the total yearly contribution by 2080.**
 - 6. Gross amount earned on all projects during the pay period.
 - 7. Total deductions from employee's wages.
 - 8. Net amount paid.
- J. The reports shall be certified by the contractor, subcontractor, or duly appointed agent stating that the payroll is correct and complete; and that the wage rates shown are not less than those required by the O.R.C. 4115.
- K. Provide a Final Affidavit to the Prevailing Wage Coordinator upon the completion of the project.

PREVAILING WAGE NOTIFICATION to EMPLOYEE

4115.05...the contractor or subcontractor shall furnish each employee NOT covered by a collective bargaining agreement written notification of the job classification to which the employee is assigned, the prevailing wage determined to be applicable to that classification, separated into the hourly rate of pay and the fringe payments, and the identity of the prevailing wage coordinator appointed by the public authority. The contractor or subcontractor shall furnish the same notification to each affected employee every time the job classification of the employee is changed.

Project Name:					Job Num	ber:
Contractor:						
Project Location:						
Prevailing Wage Co	ordinator			Е	mployee	
Public Authority:			Name:			
Name of PWC:			Street:			
Street:			City:			
City:			State/Zip:			
State/Zip:			Phone:			
			Email:			
Phone:			Last 4 Digits	of SS #:		
You will be performing work on this pr type of work you are performing.	oject that falls	under these	e classifications.	You will be	paid the app	ropriate rate for the
Classification:		ailing Wage Minus your otal Package: fringe benefits *:			Your hourly base rate and overtime:	
						/
						/
						/
						/
						/
						/
Hourly fringe benefits paid on your be	half by this con	npany (Yea	rly amount the co	mpany pa	ys divided by	/ 2080):
Fringe	Amo	unt		Fringe		Amount
Health Insurance			Vacation			
Life Insurance			Holiday			
Pension			Sick Pay			
Other (Specify)		Training				
Other (Specify)			Total Hourly	Fringes	*	
Contractor's Signature:						Date:
Employee's Signature:						Date:

INSTRUCTIONS FOR PREPARING CERTIFIED PAYROLL REPORTS

General

Contractors and subcontractors are required by law to submit certified payroll reports for work on projects covered by Ohio's Prevailing Wage Law. This form meets the reporting requirements established by Ohio Revised Code Chapter 4115. The use of this form is not mandatory; employers may submit their own forms provided that all of the required information is included. This form may be reproduced, or additional copies obtained from:

Ohio Department of Commerce Division of Industrial Compliance and Labor Bureau of Wage & Hour Administration 6606 Tussing Rd, P. O. Box 4009 Reynoldsburg, OH 43068-9009 Phone: (614) 644-2239 www.com.ohio.gov

Certified Payroll Heading

Employer name and address: Company's full name and address... Indicate if the company is a subcontractor.

Subcontractor: Check and list the name of the General Contractor or Prime.

Project: Name and location of the project, including county.

Contracting Public Authority: Name and address of the contracting public authority... (Owner of the project).

Week Ending: Month, day, and year for the last day of the reporting period.

Payroll #: Indicate first, second, third, etc. payroll filed by the company for the project.

Page Indicator: number of pages included in the report.

Project Number: Determined by the public authority... if there is no number leave it blank.

Payroll Information by Column

- Employee Name, Address and Social Security number: This information must be provided for all employees that perform physical labor on the project.
 Corporate officers, partners, and salaried employees are considered employees and must be paid the prevailing rate. Individual sole proprietors do not have to pay themselves prevailing rate but must report their hours on the project.
- 2. **Work Class:** List classification of work actually performed by employee. If unsure of work classification, consult the Ohio department of Commerce, Wage and Hour Bureau. Employees working more than one classification should have separate line entries for each classification. Indicate what year/level for Apprentices. Be specific when using laborer and operator classifications; for example, Backhoe Operator or Asphalt Laborer.
- 3. **Hours Worked, Day & Date**: In the first row of column 3 enter days of pay period example; M T W TH F S S. The second row is for the date that corresponds with each day for the pay period. In the employee information section enter the number of hours worked on the prevailing wage project and which day the hours were worked. Separate rows are labeled for (ST) straight time hours and (OT) overtime hours. All hours worked after 40, must be paid at the appropriate overtime rate.
- Project Total Hours: Total the hours entered for pay period.
- 5. **Base Rate**: Enter actual rate per hour paid to the employee. The overtime hourly rate is time and one-half the base rate listed in the prevailing wage schedule plus fringe benefits at straight time rate. The prevailing wage schedule lists the base rate plus fringe benefit amounts. These amounts added together equal the total prevailing wage rate. Employers must pay this total amount in one of three ways.
 - a. Total rate may be paid in entirety in the base rate to the employee; in which case, the cash designation will be checked for fringe benefits.
 - b. Total rate may be paid as listed in prevailing wage rate schedule with total fringe amounts paid approved plans.
 - c. Total rate may be paid with a combination of base rate and fringe payments to approved plans in amounts other than those listed in schedule.
- 6. **Project Gross:** Enter total gross wages earned on the project for straight time and overtime. Project hours X base rate should equal project gross.
- 7. **Fringes:** If fringe benefits are paid in the hourly base rate, indicate this by marking the **Cash** space. If fringe benefits are paid to approved plans as listed in the prevailing wage rate schedule, mark the space **Approved Plans**. If fringe benefits are paid partially in the base rate and partially to approved plans, mark the space **Cash & Approved plans**. List the hourly amount paid to approved plans for each fringe. If payments are not made on a per hour basis, *calculate the hourly fringe credit by dividing the yearly employer contribution by* the lesser of: hours actually worked in the year (these must be documented) or *2080*. Fringe benefits include: **Employer's share** of health insurance, life insurance, retirement plan, bonus/profit sharing, sick pay, holiday pay, personal leave, vacation, and education/training programs. If unsure of a possible fringe benefit, contact the Ohio Department of Commerce Division of Industrial Compliance and Labor Bureau of Wage & Hour Administration.
- Total Hours All Jobs: Total all hours worked during the pay period including non-prevailing wage jobs.
- Total Gross All Jobs: Gross amount earned in the pay period for all hours worked.
- 10. Self explanatory.
- 11. Self explanatory

Certified Payroll Report

Report for: Company: ¹⁾					if Subco			ame.	Contrac	ct No:						1	Payroll No	o:		
Address:				ub, o)// /III/IO C	Jonnac	7.01 140		Project	Name & L	ocation						Neek En	ding:		
City, State, Zip				lic Au	thority (O	wner):														
Phone No:																	Sheet:2)		of	
1. Employee Name,	2.Work		3.Pre	vailing	Wage Pro	ject		4.Total	5.Base	6.Project	7. Fring		Cash		pproved I	Plans		Weekly P	ayroll Amount	
Address, & SS# (Last 4 digits if permitted)	Class ³⁾		Hours	Worke	d - Day &	Date		Hours	Rate	Gross			Cash &				8.Total	9. Total		11. Net
3 1 1 1 1 1 1		F										nge Rate					Hrs for	Gross on All	10. Total	Pay on All
											H&W	Pens	Vac	Hol	Other	Total	all Jobs	Jobs	Deductions	Jobs
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By signing below, I certify rate for the class of work done defined in ORC Chapter 4115 or Subcontractor to civil or cri	e; (3) the fringe i; and (5) appre	e benefit entices a	s have be	en paid	as indicate	ed abov	e; (4) no	o rebates	or deduc	tions have b	een or wi	ll be made	e, directly	or indired	ctly from the	he total	wages earr	ed, other than	permissable de	eductions as
Type or Print Name and Titl	e							Signa	ature									Date		
11/14 jc											²⁾ Attach	additiona	al sheets	as neces	ssary.	³⁾ Ty	pe in conti	nuous line, tex	t will wrap.	

DO NOT REDO FORM AND CHANGE RATES IF AN ERROR HAS BEEN MADE! SUBMIT A CORRECTED REPORT

Report for: ompany: ¹⁾ ddress: ity, State, Zip hone No:			_ If S	ub, G	c if Subco	Contract	r ¹⁾ tor Name:		act No: ct Name & I	ocation		/			_ v	ayroll No Jeek End		of	
Employee Name, Address, & SS# (Last 4 digits if permitted)	2.Work Class ³⁾				Wage Pr	-	4.Tol	tal 5.Basers Rate				Cash &	Approve		Plans	8.Total		ayroll Amour	
			+	+						H&W	Pens	Your Cor Vac	Hol	Other		Hrs for all Jobs		10. Total Deductions	Pay on J
Name Address	Class	ОТ			1							^			1 0 0 0 1	un 0000		Dodavion	7
Last 4 SSN		ST	corre	cted, i	eriod that .e.: Oct 26 not ual weekly	to Nov 0	2,										difference	paid will be t	e total hou
		ST		-						1		olicable.		\vdash			being co	rected. Proving the in the marginal rections i	
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) By signing below, I certify te for the class of work don efined in ORC Chapter 411 Subcontractor to civil or cr ype or Print Name and Til	e; (3) the fringe 5; and (5) appro iminal prosecu	e benefits entices a tion.	s have be	en paid red wit	d as indica h the U.S.	ted above	e; (4) no reba Labor, Burea	tes or dedi	ictions have b	peen or wi Training.	ll be mad	e, directly	or indired	tly from th	ne total w	ages earn	ed, other than	permissable of	deductions
1/14 jc										2)Attach	additiona	al sheets	as neces	sary.	3)Typ	e in conti	inuous line, tex	t will wrap.	



Division of Industrial Compliance

Affidavit of Compliance

Prevailing Wages

l,		
(Name of persor	n signing affidavit) (Tit	ile)
do hereby certify that the wages paid to all emp	loyees of	
(Com	npany Name)	
for all hours worked on the		
(Project na	ame and location)	
project, during the period from(Pro	to oject Dates)	are in
compliance with prevailing wage requirements of	of Chapter 4115 of the	e Ohio Revised Code. I further
certify that no rebates or deductions have been	•	
paid in connection with this project, other than the	hose provided by law.	
(Signature	of Officer or Agent)	
Sworn to and subscribed in my presence this	day of	, 20
		(Notary Public)

The above affidavit must be executed and sworn to by the officer or agent of the contractor or subcontractor who supervises the payment of employees. This affidavit must be submitted to the owner (public authority) before the surety is released or final payment due under the terms of the contract is made.

3/2019

Name of Union: Asbestos Heat & Frost Insulators Local 8

Change #: LCN02-2019fbAsbLoc8

Craft: Asbestos Worker Effective Date: 07/03/2019 Last Posted: 07/03/2019

	Bl	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	Classification											
Asbestos Insulators	\$30	0.32	\$6.64	\$9.35	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$48.82	\$63.98
Apprentice	Per	cent										
1st year	46.35	\$14.05	\$6.64	\$5.10	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$28.30	\$35.33
2nd year	53.59	\$16.25	\$6.64	\$6.65	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$32.05	\$40.17
3rd year	58.54	\$17.75	\$6.64	\$6.65	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$33.55	\$42.42
4th year	63.48	\$19.25	\$6.64	\$6.65	\$0.41	\$0.00	\$2.10	\$0.00	\$0.00	\$0.00	\$35.05	\$44.67

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

- 1 Journeymen to 1 Apprentice
- 2 Journeymen to 2 Apprentice
- 3 Journeymen to 3 Apprentice
- 3 Journeymen to 1 Apprentice there After

Jurisdiction (* denotes special jurisdictional note):

ADAMS, BROWN, BUTLER*, CLERMONT, HAMILTON, HIGHLAND, WARREN*

Special Jurisdictional Note: In Butler County:townships of Fairfield, Hanover, Liberty, Milford, Morgan, Oxford, Ripley, Ross, St. Clair, Union & Wayne. In Warren County: Townships of Deerfield, Hamilton, Harlan, Salem, Union & Washington

Details:

All work in connection with Asbestos Removal, Abatement, Encapsulation, Lead Abatement, Hazardous Materials and Fire Stopping which is performed by employees in the Mechanic or Apprentice Classification shall be covered under the terms of this Agreement.

Name of Union: Asbestos Local 50 Zone 1

Change # : LCN02-2019fbLoc50

Craft: Asbestos Worker Effective Date: 07/10/2019 Last Posted: 07/10/2019

	Bl	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	Classification											
Asbestos Insulation Mechanic	\$32	2.53	\$7.20	\$7.24	\$0.44	\$0.00	\$2.50	\$0.15	\$0.00	\$0.00	\$50.06	\$66.33
Firestop Technician	\$32	2.53	\$7.20	\$7.24	\$0.44	\$0.00	\$2.50	\$0.15	\$0.00	\$0.00	\$50.06	\$66.33
Apprentice	Per	cent										
1st year	52.50	\$17.08	\$6.96	\$0.00	\$0.40	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$24.59	\$33.13
2nd year	62.83	\$20.44	\$6.96	\$0.91	\$0.40	\$0.00	\$0.00	\$0.15	\$0.00	\$0.00	\$28.86	\$39.08
3rd year	72.20	\$23.49	\$6.96	\$1.81	\$0.40	\$0.00	\$0.30	\$0.15	\$0.00	\$0.00	\$33.11	\$44.85
4th year	82.53	\$26.85	\$6.96	\$1.81	\$0.40	\$0.00	\$0.30	\$0.15	\$0.00	\$0.00	\$36.47	\$49.89

Special Calculation Note : Other is Industry Fund.

Ratio:

4 Journeymen to 1 Apprentice Company Wide except no apprentice may work on the jobsite without a Mechanic

Jurisdiction (* denotes special jurisdictional note):

ATHENS, AUGLAIZE, BUTLER*, CLINTON, CRAWFORD, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GUERNSEY, HARDIN, HOCKING, KNOX, LICKING, LOGAN, MADISON, MARION, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, ROSS, SHELBY, UNION, VINTON, WARREN*

Special Jurisdictional Note: Township of Butler County-Townships of Lemon and Madison. Warren County-Township of Cleer Creek, Franklin, Massie, Turtle Creek and Wayne

Details:

Name of Union: Asbestos Local 207 OH

Change #: LCN01-2018fbLoc207OH

Craft: Asbestos Worker Effective Date: 08/23/2018 Last Posted: 08/23/2018

	BHR		Fring	ge Bene	fit Payı	nents		Irrevo Fui		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Clas	sification										
Asbestos Abatement	\$25.50	\$7.25	\$6.45	\$0.65	\$0.00	\$0.00	\$0.07	\$0.00	\$0.00	\$39.92	\$52.67
Trainee	\$16.50	\$7.25	\$1.50	\$0.65	\$0.00	\$0.00	\$0.07	\$0.00	\$0.00	\$25.97	\$34.22

Special Calculation Note:

Ratio:

3 Journeymen to 1 Trainee

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ASHLAND, ASHTABULA*, ATHENS, AUGLAIZE, BROWN, BUTLER*, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARDIN, HARRISON, HIGHLAND, HOCKING, HOLMES, HURON, KNOX, LAKE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MIAMI, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PORTAGE, PREBLE, RICHLAND, ROSS, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN*, WAYNE

Special Jurisdictional Note: Butler County: (townships of

Fairfield, Hanover, Liberty, Milford, Morgan, Oxford, Ripley, Ross, StClair, Union & Wayne.) (Lemon & Madison) Warren County: (townships of: Deerfield, Hamilton, Harlan, Salem, Union & Washington). (Clear Creek, Franklin, Mossie, Turtle Creek & Wayney). Ashtabula County: (post offices & townships of Ashtabula, Austinburg, Geneva, Harperfield, Jefferson, Plymouth & Saybrook) (townships of Andover, Cherry Valley, Colbrook, Canneaut, Denmark, Dorset, East Orwell, Hartsgrove, Kingville, Lenox, Monroe, Morgan, New Lyme, North Kingsville, Orwell, Pierpoint, Richmond Rock Creek, Rome, Shefield, Trumbull,

Wayne, Williamsfield & Windsor) Erie County:(post offices & townships of Berlin, Berlin Heights, Birmingham, Florence, Huron, Milan, Shinrock & Vermilion)

Details:

Asbestos & lead paint abatement including, but not limited to the removal or encapsulation of asbestos & lead paint, all work in conjunction with the preparation of the removal of same & all work in conjunction with the clean up after said removal. The removal of all insulation materials, whether they contain asbestos or not, from mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) is recognized as being the exclusive work of the Asbestos Abatement Workers.

On all mechanical systems (pipes, boilers, ducts, flues, breaching, etc.) that are going to be demolished, the removal of all insulating materials whether they contain asbestos or not shall be the exclusive work of the Laborers.

An Abatement Journeyman is anyone who has more than 300 hours in the Asbestos Abatement field.

Name of Union: Boilermaker Local 105

Change #: LCN02-2013fbLoc 105

Craft: Boilermaker Effective Date: 10/01/2013 Last Posted: 09/25/2013

		UI LIICO	1						J -			
	B	HR		Fring	ge Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App	Vac.	Annuity	Other	LECET	MISC		
					Tr.				(*)	(*)		
Class	ification											
Boilermaker	\$3:	5.26	\$7.07	\$13.28	\$0.89	\$0.00	\$3.00	\$0.55	\$0.00	\$0.00	\$60.05	\$77.68
Apprentice	Per	cent										
1st 6 months	70.03	\$24.69	\$7.07	\$11.30	\$0.89	\$0.00	\$2.10	\$0.55	\$0.00	\$0.00	\$46.60	\$58.95
2nd 6 months	75.02	\$26.45	\$7.07	\$11.30	\$0.89	\$0.00	\$2.25	\$0.55	\$0.00	\$0.00	\$48.51	\$61.74
3rd 6 months	80.00	\$28.21	\$7.07	\$11.30	\$0.89	\$0.00	\$2.40	\$0.55	\$0.00	\$0.00	\$50.42	\$64.52
4th 6 months	85.02	\$29.98	\$7.07	\$11.30	\$0.89	\$0.00	\$2.55	\$0.55	\$0.00	\$0.00	\$52.34	\$67.33
5th 6 months	87.52	\$30.86	\$7.07	\$13.28	\$0.89	\$0.00	\$2.63	\$0.55	\$0.00	\$0.00	\$55.28	\$70.71
6th 6 months	90.03	\$31.74	\$7.07	\$13.28	\$0.89	\$0.00	\$2.70	\$0.55	\$0.00	\$0.00	\$56.23	\$72.11
7th 6 months	92.50	\$32.62	\$7.07	\$13.28	\$0.89	\$0.00	\$2.78	\$0.55	\$0.00	\$0.00	\$57.19	\$73.49
8th 6 months	95.00	\$33.50	\$7.07	\$13.28	\$0.89	\$0.00	\$2.85	\$0.55	\$0.00	\$0.00	\$58.14	\$74.89

Special Calculation Note: Other is Supplemental Health and Welfare

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			_	

5 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ATHENS, BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GREENE, GUERNSEY, HAMILTON, HIGHLAND, HOCKING, JACKSON, LAWRENCE, LICKING, MADISON, MEIGS, MIAMI, MONTGOMERY, MORGAN, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PREBLE, ROSS, SCIOTO, VINTON, WARREN

Special Jurisdictional Note:

Details:

Name of Union: Boilermaker Local 154

Change # : LCN01-2012kpLoc 154

Craft: Boilermaker Effective Date: 03/22/2012 Last Posted: 03/22/2012

Clait . Bo		HR				fit Pay		33.3	Irrevo Fur	cable	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification	l										
Boilermaker	\$3	6.17	\$8.57	\$11.28	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$62.56	\$80.65
Trainee 60%	\$2:	3.25	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$41.95	\$53.57
Trainee 70%	\$2	7.13	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$45.83	\$59.40
Trainee 80%	\$3	1.00	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$49.70	\$65.20
Trainee 90%	\$34	4.88	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$53.58	\$71.02
Apprentice Registered After 11/01/2005	Per	cent										
1st 6 months	60.00	\$21.70	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$40.40	\$51.25
2nd 6 months	65.00	\$23.51	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$42.21	\$53.97
3rd 6 months	70.00	\$25.32	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$44.02	\$56.68
4th 6 months	75.00	\$27.13	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$45.83	\$59.39
5th 6 months	80.00	\$28.94	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$47.64	\$62.10
6th 6 months	85.00	\$30.74	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$49.44	\$64.82
7th 6 months	90.00	\$32.55	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$51.25	\$67.53
8th 6 months	95.00	\$34.36	\$8.57	\$3.59	\$0.55	\$0.00	\$4.25	\$0.34	\$0.00	\$1.40	\$53.06	\$70.24

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

5 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):
BUTLER, COLUMBIANA, FAYETTE,
JEFFERSON, LAWRENCE, MERCER,
WARREN, WASHINGTON

Special Jurisdictional Note:

Details:

Work includes but not limited to: boiler making, acetylene burning, riveting, chipping, caulking, rigging, fitting-up, grinding, reaming, impact machine operating, unloading, and handling of boilermaker's material and equipment. Boilermakers, Blacksmiths, Forgers, Iron Shipbuilders

Name of Union: Bricklayer Local 18

Change #: LCN01-2019fbLoc18

Craft: Bricklayer Effective Date: 06/05/2019 Last Posted: 06/05/2019

	В	HR		Fring	e Bene	efit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sificatior	1										
Bricklayer	\$2	8.66	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.32	\$57.65
Stone Mason	\$2	8.66	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.32	\$57.65
Pointer Caulker Cleaner	\$2	8.66	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.32	\$57.65
Refractory Workers	\$2	9.66	\$8.75	\$5.38	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.31	\$59.14
Refractory Worker Hot Pay	\$3	1.66	\$8.75	\$5.38	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$46.31	\$62.14
Sawman	\$2	8.91	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.57	\$58.03
Layout Man	\$28.91		\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.57	\$58.03
Free Standing Chimney	\$2	9.16	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.82	\$58.40
Apprentice	Per	cent										
1st 6 months	60.00	\$17.20	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.86	\$40.45
2nd 6 months	65.00	\$18.63	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.29	\$42.60
3rd 6 months	70.00	\$20.06	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.72	\$44.75
4th 6 months	75.00	\$21.50	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.16	\$46.90
5th 6 months	80.00	\$22.93	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.59	\$49.05
6th 6 months	85.00	\$24.36	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.02	\$51.20
7th 6 months	90.00	\$25.79	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.45	\$53.35
8th 6 months	95.00	\$27.23	\$8.75	\$5.38	\$0.53	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.89	\$55.50

MASON FINISHER 1st 180 Days	45.00	\$12.90	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.90	\$19.35
1st Year H&W after 6 months	45.00	\$12.90	\$8.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$21.65	\$28.10
2nd Year	50.00	\$14.33	\$8.75	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23.08	\$30.25

Special Calculation Note: **In order to utilize a Pre-Apprentice, you must have 1 Registerd Apprentice in your employ.

Ratio:

1-2 Journeyman to 1 Apprentice

3-4 Journeyman to 2 Apprentice

5-6 Journeyman to 2 Apprentice

7-10 Journeyman to 3 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

BROWN, BUTLER, CLERMONT, HAMILTON, PREBLE*, WARREN

- 1 Apprentice permits 1 Mason Trainee
- 2 Apprentice permits 1 Mason Trainee
- 3 Apprenticepermits 2 Mason Trainees
- 4 Apprentice permits 2 Mason Trainees

For each additional 5 Journeyman to 1 Apprentice, for every 3 additional Apprentices, 1 Mason Finisher may be added

Special Jurisdictional Note : In Preble County the following townships are included: (Dixon, Gasper, Graits, Israel, Lanier and Somers)

Details:

MASON FINISHER:duties shall be to work in all aspects of Masonry construction taking direction from the employer and the Journeyman Bricklayer & Stone Mason's working on the job. Mason Finisher's may work on job site only when a registered apprentice is on job and the ratios in table above will strictly be enforced.

Refractory work is classified as working with any of the following materials: Acid brick, carbon black brick or carbon black block, firebrick grinding, plastics (with a gun) and any resinous cement.

Fifty cents (\$0.50) per hour above scale shall be paid to employees working on free standing industrial or institutional chimneys which are completely detached from any building structure.

Name of Union: Bricklayer Local 18 Tile Finisher

Change # : LCN01-2019fbLoc18

Craft: Bricklayer Effective Date: 09/04/2019 Last Posted: 09/04/2019

	Bl	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classifi	cation											
Bricklayer Tile Marble Terrazzo Finisher	\$24	4.69	\$9.22	\$5.10	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.51	\$51.86
Terrazzo Base Grinder	\$23	5.19	\$9.22	\$5.10	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.01	\$52.61
Marble Sander Polisher	\$24	4.79	\$9.22	\$5.10	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.61	\$52.01
Apprentices	Per	cent										
1st 6 months 0-600 hrs	60.00	\$14.81	\$9.22	\$5.10	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29.63	\$37.04
2nd 6 months 601-1200 hrs	65.00	\$16.05	\$9.22	\$5.10	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.87	\$38.89
3rd 6 months 1201-1800 hrs	70.00	\$17.28	\$9.22	\$5.10	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$32.10	\$40.74
4th 6 months 1801-2400 hrs	75.00	\$18.52	\$9.22	\$5.10	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.34	\$42.60
5th 6 months 2401-3000 hrs	80.00	\$19.75	\$9.22	\$5.10	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.57	\$44.45
6th 6 months 3001-3600	90.00	\$22.22	\$9.22	\$5.10	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.04	\$48.15
1-30 Days Prior to Entering Apprenticeship	50.00	\$12.35	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.35	\$18.52

Special Calculation Note: Classification title contains "Bricklayer" because contract originates within the Bricklayer Local.

Note that the classification description is clarified after the local union number at the top of the page. **In order to utilize a Pre-Apprentice, you must have 1 Registerd Apprentice in your employ.**

Ratio : Jurisdiction (* denotes special jurisdictional note) :

1 Journeyman to 1 Apprentice

5 Journeymen to 1 Apprentice

10 Journeymen to 2 Apprentices

15 Journeymen to 3 Apprentices

20 Journeymen to 4 Apprentices

25 Journeymen to 5 Apprentices

ADAMS, BROWN, BUTLER, CLERMONT, GALLIA, HAMILTON, LAWRENCE, PREBLE*, SCIOTO, WARREN, WARREN*

Special Jurisdictional Note : Warren in the townships of Dixon, Gasper, Isrsel, Somers & Gratis in Prebble County

Details:

Name of Union: Bricklayer Local 18 Tile Mechanic

Change #: LCN01-2019fbLoc18

Craft: Bricklayer Effective Date: 09/04/2019 Last Posted: 09/04/2019

	BHR			Fring	e Bene	fit Pay	ments	Irrevocable Fund		Total PWR	Overtime Rate	
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Tile Terrazzo Marble Mason Mechanic	\$29.24		\$9.22	\$5.10	\$0.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.10	\$58.72
Marble Layout Work	\$29.74		\$9.22	\$5.10	\$0.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$44.60	\$59.47
Swing Scaffold Worker	\$30.74		\$9.22	\$5.10	\$0.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.60	\$60.97
Apprentice after 2 years (2400 hrs) as Apprentice Finisher												
5th/6 Months 0-600 hrs.	70.00	\$20.47	\$9.22	\$5.10	\$0.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.33	\$45.56
6th/6 months 601-1200 hrs.	75.00	\$21.93	\$9.22	\$5.10	\$0.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.79	\$47.75
7th/6 months 1201-1800 hrs.	80.00	\$23.39	\$9.22	\$5.10	\$0.54		\$0.00	\$0.00	\$0.00	\$0.00	\$38.25	\$49.95
8th/6 months 1801-2400 hrs.	90.00	\$26.32	\$9.22	\$5.10	\$0.54	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.18	\$54.33

Special Calculation Note : Classification title contains "Bricklayer" because contract originates within the Bricklayer Local.

Note that the classification description is clarified after the local union number at the top of the page.

Ratio:

1 Journeyman to 1 Apprentice

5 Journeymen to 1 Apprentice

10 Journeymen to 2 Apprentices

15 Journeymen to 3 Apprentices

20 Journeymen to 4 Apprentices

25 Journeymen to 5 Apprentices

Jurisdiction (* denotes special jurisdictional note):

ADAMS, BROWN, BUTLER, CLERMONT, GALLIA, HAMILTON, LAWRENCE, PREBLE*, SCIOTO, WARREN

Special Jurisdictional Note : In Preble County the Townships of Dixon, Israel, Gasper, Lanier, Somers and Gratis.

Details:

In order to utilize a Pre-Apprentice, you must have 1 Registerd Apprentice in your employ.

Name of Union: Carpenter & Pile Driver SW District HevHwy

Change # : LCN01-2018fbLoc126

Craft: Carpenter Effective Date: 06/13/2018 Last Posted: 06/13/2018

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter	\$29.87		\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$46.59	\$61.53
Pile Driver	\$29.34		\$6.63	\$6.95	\$0.40	\$0.00	\$1.97	\$0.10	\$0.00	\$0.00	\$45.39	\$60.06
Apprentice	Percent											
1st 6 Months	60.00	\$17.92	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$34.64	\$43.60
2nd 6 Months is 1st year	65.00	\$19.42	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$36.14	\$45.84
3rd 6 Months	70.00	\$20.91	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$37.63	\$48.08
4th 6 Months is 2 years	75.00	\$22.40	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$39.12	\$50.32
5th 6 Months	80.00	\$23.90	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$40.62	\$52.56
6th 6 Months is 3 years	85.00	\$25.39	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$42.11	\$54.80
7th 6 Months	90.00	\$26.88	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$43.60	\$57.04
8th 6 Months is 4 years	95.00	\$28.38	\$7.08	\$6.95	\$0.38	\$0.00	\$2.19	\$0.12	\$0.00	\$0.00	\$45.10	\$59.28

Special Calculation Note: Other is UBC National Fund.

Ratio:

1 Journeymen to 1 Apprentice

An employer shall have the right to employ one (1) Apprentice for one (1) Journeyman Carpenter in its employment for the first Apprentice (2) HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY, WARREN

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY, WARREN

Journeyman Carpenter for additional Apprectices employed.

Thereafter, every third additional carpenter hired shall be an apprentice, if available, and if practical for the type of work being performed.

Special Jurisdictional Note:

Details:

Highway Construction, Airport Construction, Heavy Construction but not limited to: (tunnels, subways, drainage projects, flood control, reservoirs). Railroad Construction, Sewer Waterworks & Utility Construction but not limited to: (storm sewers, waterlines, gaslines). Industrial & Building Site, Power Plant, Amusement Park, Athletic Stadium Site, Sewer and Water Plants. When the Contractor furnishes the necessary underwater gear for the Diver, the Diver shall be paid one and one half (1&1/2) times the journeyman rate for the time spent in the water.

Name of Union: Carpenter & Pile Driver SW Zone 2

Change #: LCN01-2019fbLoc126

Craft: Carpenter Effective Date: 06/01/2019 Last Posted: 05/30/2019

		HR				fit Pay			Irrevo	cable	Total	Overtime
									Fur	ıd	PWR	Rate
			H&W	Pension	App	Vac.	Annuity	Other	LECET	MISC		
					Tr.				(*)	(*)		
Class	sification	ı										
Carpenter	\$2	7.29	\$7.33	\$6.95	\$0.38	\$0.00	\$1.40	\$0.17	\$0.00	\$0.00	\$43.52	\$57.17
Pile Driver	\$2:	5.84	\$6.62	\$6.95	\$0.40	\$0.00	\$0.91	\$0.10	\$0.00	\$0.00	\$40.82	\$53.74
Apprentice	Per	cent										
1st 3 Months	60.00	\$16.37	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.37	\$24.56
2nd 3 Months	60.00	\$16.37	\$7.33	\$0.00	\$0.38	\$0.00	\$1.40	\$0.17	\$0.00	\$0.00	\$25.65	\$33.84
2rd 6 Months	60.00	\$16.37	\$7.33	\$0.00	\$0.38	\$0.00	\$1.40	\$0.17	\$0.00	\$0.00	\$25.65	\$33.84
3rd 6 Months	65.00	\$17.74	\$7.33	\$0.00	\$0.38	\$0.00	\$1.40	\$0.17	\$0.00	\$0.00	\$27.02	\$35.89
4th 6 Months	65.00	\$17.74	\$7.33	\$0.00	\$0.38	\$0.00	\$1.40	\$0.17	\$0.00	\$0.00	\$27.02	\$35.89
5th 6 Months	70.00	\$19.10	\$7.33	\$6.95	\$0.38	\$0.00	\$1.40	\$0.17	\$0.00	\$0.00	\$35.33	\$44.88
6th 6 Months	75.00	\$20.47	\$7.33	\$6.95	\$0.38	\$0.00	\$1.40	\$0.17	\$0.00	\$0.00	\$36.70	\$46.93
7th 6 Months	80.00	\$21.83	\$7.33	\$6.95	\$0.38	\$0.00	\$1.40	\$0.17	\$0.00	\$0.00	\$38.06	\$48.98
8th 6 Months	85.00	\$23.20	\$7.33	\$6.95	\$0.38	\$0.00	\$1.40	\$0.17	\$0.00	\$0.00	\$39.43	\$51.02

Special Calculation Note: Other is for UBC National Fund.

Ratio:

1 Journeyman to 1 Apprentice

3 Journeyman to 1 Apprentice

5 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

Special Jurisdictional Note:

Details:

Carpenter duties shall include but not limited to: Pile driving,

milling,fashioning,joining,assembling,erecting,fastening, or dismantling of all material of wood,plastic,metal,fiber,cork,and composition, and all other substitute materials: pile driving,cutting,fitting,and placing of lagging, and the handling,cleaning,erecting,installing,and dismantling of machinery,equipment,and erecting pre-engineered metal buildings.

Pile Drivers work but not limited to: unloading,

assembling,erection,repairs,operation,signaling,dismantling, and reloading all equipment that is used for pile driving including pile butts. pile butts is defined as sheeting or scrap piling. Underwater work that may be required in connection with the installation of piling. The diver and his tender work as a team and shall arrive at their own financial arrangements with the contractor. Any configuration of wood, steel, concrete, or composite that is jetted, driven, or vibrated onto the ground by conventional pile driving equipment for the purpose of supporting a future load that may be permanent or temporary.

Driving bracing, plumbing, cutting off and capping of all piling whether wood, metal, pipe piling or composite. loading, unloading, erecting, framing, dismantling, moving, and handling of pile driving equipment. piling used in the construction and repair of all wharves, docks, piers, trestles, caissons, cofferdams, and the erection of all sea walls and breakwaters. All underwater and marine work on bulkheads, wharves, docks, shipyards, caissons, piers, bridges, pipeline work, viaducts, marine cable and trestles, as well as salvage and reclamation work where divers are employed. Rate shall include carpenters, acoustic, and ceiling installers, drywall installers, pile drivers, and

Rate shall include carpenters, acoustic, and ceiling installers, drywall installers, pile drivers, and floorlayers.

Name of Union: Carpenter Floorlayer SW District G

Change #: LCR01-2018fbLocSWDayton

Craft: Carpenter Effective Date: 10/10/2018 Last Posted: 10/10/2018

	Bl	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	ı										
Carpenter Floorlayer	\$2:	5.16	\$7.11	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$40.63	\$53.21
Apprentice	Per	cent										
1st 3 months	50.00	\$12.58	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$12.58	\$18.87
2nd 3 months	50.00	\$12.58	\$6.65	\$0.00	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$20.64	\$26.93
2nd 6 months	55.00	\$13.84	\$6.65	\$0.00	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$21.90	\$28.82
3rd 6 months	60.00	\$15.10	\$6.65	\$0.00	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$23.16	\$30.70
4th 6 months	65.00	\$16.35	\$6.65	\$0.00	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$24.41	\$32.59
5th 6 months	70.00	\$17.61	\$6.65	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$32.62	\$41.43
6th 6 months	75.00	\$18.87	\$6.65	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$33.88	\$43.32
7th 6 months	80.00	\$20.13	\$6.65	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$35.14	\$45.20
8th 6 months	85.00	\$21.39	\$6.65	\$6.95	\$0.29	\$0.00	\$1.00	\$0.12	\$0.00	\$0.00	\$36.40	\$47.09

Special Calculation Note: Other for \$0.12 is for UBC National Fund.

Ratio:

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY, WARREN

Special Jurisdictional Note:

Details:

Scope of work shall include, but not be limited to: receiving,unloading,handling,distribution and installation of all carpeting materials,carpet padding or matting materials and all resilient materials whether for use on walls, floors,counter, sink,table and all preparation work necessary in connection therewith, including sanding work. the installation of nonstructural under-layment and the work of removing, cleaning waxing of any of the above. Carpeting shall include any floor covering composed of either natural or synthetic fibers that are made in breadths to be sewed, fastened or directly glued to floors or over cushioning sound-proofing materials. Resilient Floors shall consist of and include the laying of all special designs of wood,wood block, wood composition, cork, linoleum, asphalt, mastic, plastic, rubber tile,whether nailed or glued.

Name of Union: Carpenter Millwright Local 1090 SW Zone I

Change # : LCN01-2018fbLoc1066

Craft: Carpenter Effective Date: 10/17/2018 Last Posted: 10/17/2018

	B	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	l										
Carpenter Millwright	\$30	0.48	\$7.17	\$6.95	\$0.44	\$0.00	\$6.36	\$0.25	\$0.00	\$0.00	\$51.65	\$66.89
Apprentice	Per	cent										
1st 6 months	60.00	\$18.29	\$7.17	\$4.27	\$0.44	\$0.00	\$3.82	\$0.25	\$0.00	\$0.00	\$34.24	\$43.38
2nd 6 months	65.00	\$19.81	\$7.17	\$4.61	\$0.44	\$0.00	\$4.13	\$0.25	\$0.00	\$0.00	\$36.41	\$46.32
3rd 6 months	70.00	\$21.34	\$7.17	\$4.94	\$0.44	\$0.00	\$4.45	\$0.25	\$0.00	\$0.00	\$38.59	\$49.25
4th 6 months	75.00	\$22.86	\$7.17	\$5.28	\$0.44	\$0.00	\$4.77	\$0.25	\$0.00	\$0.00	\$40.77	\$52.20
5th 6 months	80.00	\$24.38	\$7.17	\$5.61	\$0.44	\$0.00	\$5.09	\$0.25	\$0.00	\$0.00	\$42.94	\$55.14
6th 6 months	85.00	\$25.91	\$7.17	\$5.95	\$0.44	\$0.00	\$5.41	\$0.25	\$0.00	\$0.00	\$45.13	\$58.08
7th 6 months	90.00	\$27.43	\$7.17	\$6.28	\$0.44	\$0.00	\$5.72	\$0.25	\$0.00	\$0.00	\$47.29	\$61.01
8th 6 months	95.00	\$28.96	\$7.17	\$6.62	\$0.44	\$0.00	\$6.04	\$0.25	\$0.00	\$0.00	\$49.48	\$63.95

Special Calculation Note : Other (\$0.25) \$0.10 National Fund, \$0.10. Drug Safety Program \$0.10 and National Millwright Fund \$0.05

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):

RECOUNT BUTLED CLERMONT CL

BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

Special Jurisdictional Note:

Name of Union: Carpenter NE District Industrial Dock & Door

Change #: LCN01-2014fbCarpNEStatewide

Craft: Carpenter Effective Date: 03/05/2014 Last Posted: 03/05/2014

	BI	HR		Fring	ge Bene	fit Payr	nents		Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Cla	assification											
Carpenter	\$19	9.70	\$5.05	\$1.00	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.90	\$35.75
Trainee	Per	cent										
1st Year	60.00 \$11.82		\$5.05	\$1.00	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$18.02	\$23.93
2nd Year	80.20	\$15.80	\$5.05	\$1.00	\$0.15	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$22.00	\$29.90

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 Journeymen to 1 Trainee

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note: Industrial Dock and Door is the installation of overhead doors, roll up doors and dock leveling equipment

Details:

10/27/10 New Contract jc

Name of Union: Cement Mason Bricklayer Local 97 HevHwy A

Change #: LCN01-2019fbHvyHwy

Craft: Bricklayer Effective Date: 06/01/2019 Last Posted: 05/29/2019

	B	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	l										
Cement Mason Bricklayer Sewer Water Works A	t \$29.34 ayer		\$9.25	\$6.41	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$45.45	\$60.12
Apprentice	Percent											
1st year	50.00	\$14.67	\$9.25	\$6.41	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.78	\$38.12
2nd year	70.00	\$20.54	\$9.25	\$6.41	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.65	\$46.92
3rd year	90.00	\$26.41	\$9.25	\$6.41	\$0.45	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.52	\$55.72

Special Calculation Note: NOT FOR BUILDING CONSTRUCTION.

Ratio:

3 Journeymen to 1 Apprentice 6 Journeymen to 2 Apprentice

9 Journeymen to 3 Apprentice

12 Journeymen to 4 Apprentice

15 Journeymen to 5 Apprentice

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND,

ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note:

- (A) Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.
- (B) Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control,Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

Name of Union: Cement Mason Bricklayer Local 97 HevHwy B

Change #: LCN01-2019fbHvyHwy

Craft: Bricklayer Effective Date: 06/01/2019 Last Posted: 05/29/2019

	B	HR		Fring	e Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	l										
Cement Mason Bricklayer Power Plants Tunnels Amusement Parks B	\$30	0.33	\$9.25	\$6.41	\$0.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$46.45	\$61.62
Apprentice	Per	cent										
1st year	50.00	\$15.16	\$9.25	\$6.41	\$0.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.28	\$38.87
2nd year	70.00	\$21.23	\$9.25	\$6.41	\$0.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.35	\$47.97
3rd year	90.00	\$27.30	\$9.25	\$6.41	\$0.46	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$43.42	\$57.07

Special Calculation Note: NOT FOR BUILDING CONSTRUCTION.

Ratio:

- 3 Journeymen to 1 Apprentice
- 6 Journeymen to 2 Apprentice
- 9 Journeymen to 2 Apprentice
- 12 Journeymen to 4 Apprentice
- 15 Journeymen to 5 Apprentice

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA,

PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note:

- (A) Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site Heavy Construction, Airport Construction Or Railroad Construction Work.
- (B) Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control,Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

Name of Union: Cement Mason Local 132 (Cincinnati)

Change # : LCN01-2018fbLoc132

Craft: Cement Effective Date: 06/13/2018 Last Posted: 06/13/2018

	B	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	l										
Cement Mason	\$23	3.65	\$6.70	\$6.50	\$0.55	\$0.00	\$0.70	\$0.00	\$0.00	\$0.00	\$38.10	\$49.92
Apprentice	Percent											
1st yr	70.00 \$16.55		\$6.70	\$6.50	\$0.55	\$0.00	\$0.70	\$0.00	\$0.00	\$0.00	\$31.00	\$39.28
2nd yr	80.00	\$18.92	\$6.70	\$6.50	\$0.55	\$0.00	\$0.70	\$0.00	\$0.00	\$0.00	\$33.37	\$42.83
3rd yr	90.00	\$21.28	\$6.70	\$6.50	\$0.55	\$0.00	\$0.70	\$0.00	\$0.00	\$0.00	\$35.74	\$46.38

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 Journeymen to 1 Apprentice

4 Journeymen to 2 Apprentice

7 Journeymen to 3 Apprentice

10 Journeymen to 4 Apprentice

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN

Special Jurisdictional Note:

- *Cement Masons working on silo & slip form work shall receive \$.50 per hour over Journeyman scale.
- *Cement Masons working on swinging scaffolds shall receive \$.50 per hour over Journeyman scale.
- *Cement Masons working on high lifts from 20' and above shall receive \$.50 per hour over Journeyman scale.

Name of Union: Cement Mason Statewide HevHwy Exhibit A District II

Change # : OCN01-2019fbCementHevHwy

Craft: Cement Mason Effective Date: 07/31/2019 Last Posted: 07/31/2019

	B	HR		Fring	ge Benefit Payments				Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	l										
Cement Mason	\$29	9.36	\$8.00	\$6.90	\$0.71	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$47.22	\$61.90
Apprentice	Percent											
1st Year	70.00 \$20.55		\$8.00	\$6.90	\$0.71	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$38.41	\$48.69
2nd Year	80.00	\$23.49	\$8.00	\$6.90	\$0.71	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$41.35	\$53.09
3rd Year	90.00	\$26.42	\$8.00	\$6.90	\$0.71	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$44.28	\$57.50

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 Journeymen to 1 Apprentice 2 to 1 thereafter

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, COLUMBIANA, DEFIANCE, ERIE, HAMILTON, HIGHLAND, HURON, LORAIN, MAHONING, MEDINA, OTTAWA, PAULDING, PORTAGE, SANDUSKY, SENECA, STARK, SUMMIT, TRUMBULL,

WARREN, WILLIAMS

Special Jurisdictional Note: (A) Highway Construction, Sewer, Waterworks And Utility Construction, Industrial & Building Site, Heavy Construction, Airport Construction Or Railroad Construction Work.

Name of Union: Cement Mason Statewide HevHwy Exhibit B District II

Change #: OCN01-2019fbCementHevHwy

Craft: Cement Mason Effective Date: 07/31/2019 Last Posted: 07/31/2019

	Bl	HR		Fring	e Bene	fit Pay	ments		Irrevo Fun		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	l										
Cement Mason	\$30	0.23	\$8.00	\$6.90	\$0.71	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$48.09	\$63.21
Apprentice	Percent											
1st Year	70.00	\$21.16	\$8.00	\$6.90	\$0.71	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$39.02	\$49.60
2nd Year	80.00	\$24.18	\$8.00	\$6.90	\$0.71	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$42.04	\$54.14
3rd Year	90.00	\$27.21	\$8.00	\$6.90	\$0.71	\$0.00	\$2.25	\$0.00	\$0.00	\$0.00	\$45.07	\$58.67

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 Journeymen to 1 Apprentice 2 to 1 thereafter

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, COLUMBIANA, DEFIANCE, ERIE, HAMILTON, HIGHLAND, HURON, LORAIN, MAHONING, MEDINA, OTTAWA, PAULDING, PORTAGE, SANDUSKY, SENECA, STARK, SUMMIT, TRUMBULL, WARREN, WILLIAMS

Special Jurisdictional Note: (B) Power Plant, Tunnels, Amusement Park, Athletic Stadium Site Work ,Pollution Control,Sewer Plant, Waste Plant, & Water Treatment Facilities, Construction.

Name of Union: Electrical Local 71 High Tension Pipe Type Cable

Change #: LCN01-2019fbLoc7

Craft: Lineman Effective Date: 04/24/2019 Last Posted: 04/24/2019

	BH	IR		Fring	ge Bene	fit Payı	nents		Irrevo Fu		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classi	ification											
Electrical Lineman	\$43	.48	\$6.00	\$1.30	\$0.43	\$0.00	\$10.00	\$0.35	\$0.00	\$0.00	\$61.56	\$83.30
Certified Lineman Welder	\$43	.48	\$6.00	\$1.30	\$0.43	\$0.00	\$10.00	\$0.35	\$0.00	\$0.00	\$61.56	\$83.30
Certified Cable Splicer	\$43	.48	\$6.00	\$1.30	\$0.43	\$0.00	\$10.00	\$0.35	\$0.00	\$0.00	\$61.56	\$83.30
Operator A	\$39	.02	\$6.00	\$1.17	\$0.39	\$0.00	\$8.97	\$0.35	\$0.00	\$0.00	\$55.90	\$75.41
Operator B	\$34	.60	\$6.00	\$1.04	\$0.35	\$0.00	\$7.96	\$0.35	\$0.00	\$0.00	\$50.30	\$67.60
Operator C	\$27	.93	\$6.00	\$0.84	\$0.28	\$0.00	\$6.42	\$0.35	\$0.00	\$0.00	\$41.82	\$55.79
Groundman 0-12 months Exp	\$21	.74	\$6.00	\$0.65	\$0.22	\$0.00	\$5.00	\$0.35	\$0.00	\$0.00	\$33.96	\$44.83
Groundman 0-12 months Exp w/CDL	\$23	.91	\$6.00	\$0.72	\$0.24	\$0.00	\$5.50	\$0.35	\$0.00	\$0.00	\$36.72	\$48.68
Groundman 1 yr or more	\$23	.91	\$6.00	\$0.72	\$0.24	\$0.00	\$5.50	\$0.35	\$0.00	\$0.00	\$36.72	\$48.68
Groundman 1 yr or more w/CDL	\$28	2.26	\$6.00	\$0.85	\$0.28	\$0.00	\$6.50	\$0.35	\$0.00	\$0.00	\$42.24	\$56.37
Equipment Mechanic A	\$34	60	\$6.00	\$1.04	\$0.35	\$0.00	\$7.96	\$0.35	\$0.00	\$0.00	\$50.30	\$67.60
Equipment Mechanic B	\$31	.26	\$6.00	\$0.94	\$0.31	\$0.00	\$7.19	\$0.35	\$0.00	\$0.00	\$46.05	\$61.68
Equipment Mechanic C	\$27	7.93	\$6.00	\$0.84	\$0.28	\$0.00	\$6.42	\$0.35	\$0.00	\$0.00	\$41.82	\$55.79
X-Ray Technician	\$43	.48	\$6.00	\$1.30	\$0.43	\$0.00	\$10.00	\$0.35	\$0.00	\$0.00	\$61.56	\$83.30
Apprentice	Pero	ent										
1st 1000 hrs	60.00	\$26.09	\$6.00	\$0.78	\$0.26	\$0.00	\$6.00	\$0.35	\$0.00	\$0.00	\$39.48	\$52.52

2nd 1000 hrs	65.00	\$28.26	\$6.00	\$0.85	\$0.28	\$0.00	\$6.50	\$0.35	\$0.00	\$0.00	\$42.24	\$56.37
3rd 1000 hrs	70.00	\$30.44	\$6.00	\$0.91	\$0.30	\$0.00	\$7.00	\$0.35	\$0.00	\$0.00	\$45.00	\$60.21
4th 1000 hrs	75.00	\$32.61	\$6.00	\$0.98	\$0.33	\$0.00	\$7.50	\$0.35	\$0.00	\$0.00	\$47.77	\$64.07
5th 1000 hrs	80.00	\$34.78	\$6.00	\$1.04	\$0.35	\$0.00	\$8.00	\$0.35	\$0.00	\$0.00	\$50.52	\$67.92
6th 1000 hrs	85.00	\$36.96	\$6.00	\$1.11	\$0.37	\$0.00	\$8.50	\$0.35	\$0.00	\$0.00	\$53.29	\$71.77
7th 1000 hrs	90.00	\$39.13	\$6.00	\$1.17	\$0.39	\$0.00	\$9.00	\$0.35	\$0.00	\$0.00	\$56.04	\$75.61

Special Calculation Note: Other is Health Retirement Account

Operator "A"

John Henry Rock Drill, D-6 (or equivalent) and above, Trackhoe Digger, (320 Track excavator), Cranes (greater then 25 tons and less than 45 tons).

Operator "B"

Cranes (greater than 6 tons and up to 25 tons), Backhoes, Road Tractor, Dozer up to D-5, Pressure Digger- wheeled or tracked, all Tension wire Stringing equipment.

Operator "C"

Trench, Backhoe, Riding type vibratory Compactor, Ground Rod Driver, Boom Truck (6 ton & below), Skid Steer Loaders, Material Handler.

*All Operators of cranes 45 ton or larger shall be paid the journeyman rate of pay. \$0.30 is for Health Retirement Account.

Ratio:

1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARRISON, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, RICHLAND, ROSS, SCIOTO, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note:

Details:

Heli - Arc Welding will be paid \$.30 above Journeyman rate. Additional compensation of 10% over the Journeyman Lineman and Journeyman Technician for performing work on structures outside of buildings such as water towers, smoke stacks, radio and television towers, more than 75' above the ground.

Name of Union: Electrical Local 71 Outside Cincinnati

Change #: LCN01-2019fbLoc71Cincinnati

Craft: Lineman Effective Date: 04/24/2019 Last Posted: 04/24/2019

	BHR		Fring	e Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification										
Electrical Lineman	\$38.27	\$6.00	\$1.15	\$0.38	\$0.00	\$6.89	\$0.06	\$0.00	\$0.00	\$52.75	\$71.89
Traffic Signal & Lighting Journeyman	\$36.81	\$6.00	\$1.10	\$0.37	\$0.00	\$6.63	\$0.06	\$0.00	\$0.00	\$50.97	\$69.37
Equipment Operator	\$33.62	\$6.00	\$1.01	\$0.34	\$0.00	\$6.05	\$0.06	\$0.00	\$0.00	\$47.08	\$63.89
Groundman 0-12 months (W/O CDL)	\$20.39	\$6.00	\$0.61	\$0.20	\$0.00	\$3.67	\$0.06	\$0.00	\$0.00	\$30.93	\$41.13
Groundman 0-21 Months (W/CDL)	\$22.27	\$6.00	\$0.67	\$0.22	\$0.00	\$4.01	\$0.06	\$0.00	\$0.00	\$33.23	\$44.37
Groundman 1 Year or More (W/CDL)	\$24.17	\$6.00	\$0.73	\$0.24	\$0.00	\$4.35	\$0.06	\$0.00	\$0.00	\$35.55	\$47.64
Traffic Signal Apprentices											
1st 1,000 hours	\$22.09	\$6.00	\$0.66	\$0.22	\$0.00	\$3.98	\$0.06	\$0.00	\$0.00	\$33.01	\$44.05
2nd 1,000 hours	\$23.93	\$6.00	\$0.72	\$0.24	\$0.00	\$4.31	\$0.06	\$0.00	\$0.00	\$35.26	\$47.23
3rd 1,000 hours	\$25.77	\$6.00	\$0.77	\$0.26	\$0.00	\$4.64	\$0.06	\$0.00	\$0.00	\$37.50	\$50.39
4th 1,000 hours	\$27.61	\$6.00	\$0.83	\$0.28	\$0.00	\$4.97	\$0.06	\$0.00	\$0.00	\$39.75	\$53.56
5th 1,000 hours	\$29.45	\$6.00	\$0.88	\$0.29	\$0.00	\$5.30	\$0.06	\$0.00	\$0.00	\$41.98	\$56.71
6th 1,000 hours	\$33.13	\$6.00	\$0.99	\$0.33	\$0.00	\$5.96	\$0.06	\$0.00	\$0.00	\$46.47	\$63.04

Apprentice Lineman	Per	cent										
1st 1,000 Hours	60.00	\$22.96	\$6.00	\$0.69	\$0.23	\$0.00	\$4.13	\$0.06	\$0.00	\$0.00	\$34.07	\$45.55
2nd 1,000 Hours	65.00	\$24.88	\$6.00	\$0.75	\$0.25	\$0.00	\$4.48	\$0.06	\$0.00	\$0.00	\$36.42	\$48.85
3rd 1,000 Hours	70.00	\$26.79	\$6.00	\$0.80	\$0.27	\$0.00	\$4.82	\$0.06	\$0.00	\$0.00	\$38.74	\$52.13
4th 1,000 Hours	75.00	\$28.70	\$6.00	\$0.86	\$0.29	\$0.00	\$5.17	\$0.06	\$0.00	\$0.00	\$41.08	\$55.43
5th 1,000 Hours	80.00	\$30.62	\$6.00	\$0.92	\$0.31	\$0.00	\$5.51	\$0.06	\$0.00	\$0.00	\$43.42	\$58.72
6th 1,000 Hours	85.00	\$32.53	\$6.00	\$0.98	\$0.33	\$0.00	\$5.86	\$0.06	\$0.00	\$0.00	\$45.76	\$62.02
7th 1,000 Hours	90.00	\$34.44	\$6.00	\$1.03	\$0.34	\$0.00	\$6.20	\$0.06	\$0.00	\$0.00	\$48.07	\$65.29

Special Calculation Note: Other is Safety & Education Fund.

Ratio:

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, HAMILTON, WARREN

Special Jurisdictional Note:

Details:

A groundman when directed shall assist a Journeyman in the performance of his/her work on the ground, including the use of hand tools. A Groundman under no circumstances shall climb poles, towers,ladders, or work from an elevated platform or bucket truck.

No more than three (3) Groundmen shall work alone. Jobs with more that three Groundmen shall be supervised by a Groundcrew Foreman, Journeyman Lineman, Journeyman Traffic Signal Technician or an Equipment Operator.

Scope of Work: installation and maintenance of highway and street lighting, highway and street sign lighting, electronic message boards and traffic control systems, camera systems, traffic signal work, substation and line construction including overhead and underground projects for private and industrial work as in accordance with the IBEW Constitution. This Agreement includes the operation of all tools and equipment necessary for the installation of the above projects.

Name of Union: Electrical Local 71 Outside Utility Power

Change #: LCN01-2019fbLoc7

Craft: Lineman Effective Date: 04/24/2019 Last Posted: 04/24/2019

	Bl	HR		Fring	ge Bene	fit Payı	nents		Irrevo Fu		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification											
Electrical Lineman	\$41	1.22	\$6.00	\$1.24	\$0.41	\$0.00	\$9.48	\$0.35	\$0.00	\$0.00	\$58.70	\$79.31
Substation Technician	\$41	1.22	\$6.00	\$1.24	\$0.41	\$0.00	\$9.48	\$0.35	\$0.00	\$0.00	\$58.70	\$79.31
Cable Splicer	\$43	3.14	\$6.00	\$1.29	\$0.43	\$0.00	\$9.92	\$0.35	\$0.00	\$0.00	\$61.13	\$82.70
Operator A	\$37	7.00	\$6.00	\$1.11	\$0.37	\$0.00	\$8.51	\$0.35	\$0.00	\$0.00	\$53.34	\$71.84
Operator B	\$32	2.78	\$6.00	\$0.98	\$0.33	\$0.00	\$7.54	\$0.35	\$0.00	\$0.00	\$47.98	\$64.37
Operator C	\$26	5.44	\$6.00	\$0.79	\$0.26	\$0.00	\$6.08	\$0.35	\$0.00	\$0.00	\$39.92	\$53.14
Groundman 0-12 months Exp).61	\$6.00	\$0.62	\$0.21		\$4.74	\$0.35	\$0.00	\$0.00	\$32.53	\$42.84
Groundman 0-12 months Exp w/CDL	\$22.67 \$22.67		\$6.00	\$0.68	\$0.23	\$0.00	\$5.21	\$0.35	\$0.00	\$0.00	\$35.14	\$46.48
Groundman 1 yr or more	\$22	2.67	\$6.00	\$0.68	\$0.23	\$0.00	\$5.21	\$0.35	\$0.00	\$0.00	\$35.14	\$46.48
Groundman 1 yr or more w/CDL	\$20	5.80	\$6.00	\$0.80	\$0.27	\$0.00	\$6.16	\$0.35	\$0.00	\$0.00	\$40.38	\$53.78
Equipment Mechanic A	\$32	2.78	\$6.00	\$0.98	\$0.33	\$0.00	\$7.54	\$0.35	\$0.00	\$0.00	\$47.98	\$64.37
Equipment Mechanic B	\$29	9.62	\$6.00	\$0.89	\$0.30	\$0.00	\$6.81	\$0.35	\$0.00	\$0.00	\$43.97	\$58.78
Equipment Mechanic C	\$20	5.44	\$6.00	\$0.79	\$0.26	\$0.00	\$6.08	\$0.35	\$0.00	\$0.00	\$39.92	\$53.14
Line Truck w/uuger	\$29	9.17	\$6.00	\$0.88	\$0.29	\$0.00	\$6.71	\$0.35	\$0.00	\$0.00	\$43.40	\$57.99
Apprentice	Per	cent										
1st 1000 hrs	60.00	\$24.73	\$6.00	\$0.74	\$0.25	\$0.00	\$5.69	\$0.35	\$0.00	\$0.00	\$37.76	\$50.13
2nd 1000 hrs	65.00	\$26.79	\$6.00	\$0.80	\$0.27	\$0.00	\$6.16	\$0.35	\$0.00	\$0.00	\$40.37	\$53.77

3rd 1000 hrs	70.00	\$28.85	\$6.00	\$0.87	\$0.29	\$0.00	\$6.64	\$0.35	\$0.00	\$0.00	\$43.00	\$57.43
4th 1000 hrs	75.00	\$30.91	\$6.00	\$0.93	\$0.31	\$0.00	\$7.11	\$0.35	\$0.00	\$0.00	\$45.62	\$61.07
5th 1000 hrs	80.00	\$32.98	\$6.00	\$0.99	\$0.33	\$0.00	\$7.59	\$0.35	\$0.00	\$0.00	\$48.24	\$64.72
6th 1000 hrs	85.00	\$35.04	\$6.00	\$1.05	\$0.35	\$0.00	\$8.06	\$0.35	\$0.00	\$0.00	\$50.85	\$68.37
7th 1000 hrs	90.00	\$37.10	\$6.00	\$1.11	\$0.37	\$0.00	\$8.53	\$0.35	\$0.00	\$0.00	\$53.46	\$72.01

Special Calculation Note: Other is Health Retirement Account

Operator "A"

John Henry Rock Drill, D-6 (or equivalent) and above, Trackhoe Digger, (320 Track excavator), Cranes (greater then 25 tons and less than 45 tons).

Operator "B"

Cranes (greater than 6 tons and up to 25 tons), Backhoes, Road Tractor, Dozer up to D-5, Pressure Digger- wheeled or tracked, all Tension wire Stringing equipment.

Operator "C"

Trench, Backhoe, Riding type vibratory Compactor, Ground Rod Driver, Boom Truck (6 ton & below), Skid Steer Loaders, Material Handler.

Ratio:

(1) Journeyman Lineman to (1) Apprentice

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARRISON, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, RICHLAND, ROSS, SCIOTO, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note: 0.30 is for Health Retirement Account.

Details:

Heli - Arc Welding will be paid \$.30 above Journeyman rate. Additional compensation of 10% over the Journeyman Lineman and Journeyman Technician for performing work on structures outside of buildings such as water towers, smoke stacks, radio and television towers, more than 75' above the ground.

Name of Union: Electrical Local 71 Voice Data Video Outside

Change #: LCR01-2017fbLoc71VDV

Craft: Voice Data Video Effective Date: 10/18/2017 Last Posted: 10/18/2017

	BHR		Fring	ge Bene	fit Payı	ments		Irrevo Fui		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classific	ation										
Electrical Installer Technician I	\$23.46	\$5.50	\$0.70	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$29.96	\$41.69
Installer Technician II	\$22.37	\$5.50	\$0.67	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$28.84	\$40.03
Equipment Operator I	\$22.37	\$5.50	\$0.67	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$28.84	\$40.03
Equipment Operator II	\$18.43	\$5.50	\$0.55	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$24.78	\$33.99
Installer /Repair Outside	\$22.37	\$5.50	\$0.67	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$28.84	\$40.03
Ground Driver W/CDL	\$15.83	\$5.50	\$0.47	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$22.10	\$30.01
Groundman	\$13.24	\$5.50	\$0.40	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$19.44	\$26.06
Cable Splicer	\$23.46	\$5.50	\$0.70	\$0.00	\$0.00	\$0.30	\$0.00	\$0.00	\$0.00	\$29.96	\$41.69

Special Calculation Note:

Ratio:

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HARRISON, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW,

MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, RICHLAND, ROSS, SCIOTO, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VINTON, WARREN, WASHINGTON, WAYNE

Special Jurisdictional Note:

Details:

Cable Splicer: Inspect and test lines or cables, analyze results, and evaluate transmission characteristics. Cover conductors with insulation or seal splices with moisture-proof covering. Install, splice, test, and repair cables using tools or mechanical equipment. This will include the splicing of fiber.

Journeyman Technician I: Must know all aspects of telephone and cable work. This is to include aerial, underground, and manhole work. Must know how to climb and run bucket. Must have all the tools required to perform these tasks. Must be able to be responsible for the safety of the crew at all times. Must also have CDL license and have at least 5 years experience.

Installer/Repairman: Perform tasks of repairing, installing, and testing phone and CATV services.

Technician II: Have at least three years of telephone and CATV experience. Must have the knowledge of underground, aerial, and manhole work. Must be able to climb and operate bucket. Must have CDL. Must have all tools needed to perform these tasks.

Equipment Operator I: Able to operate a digger derrick or bucket truck. Have at least 5 years of experience and must have a valid CDL license.

Equipment Operator II: Able to operate a digger derrick or bucket truck. Have at least 3 years of experience and must have a valid CDL license.

Groundman W/CDL: Must have a valid CDL license and be able to perform tasks such as: climbing poles, pulling downguys, making up material, and getting appropriate tools for the job. Must have at least 5 year's experience.

Groundman: Perform tasks such as: climbing poles, pulling downguys, making up material, and getting appropriate tools for the job. Experience 0-5 years.

Name of Union: Electrical Local 82 Inside

Change #: LCN01-2019fbLoc82in

Craft: Electrical Effective Date: 06/19/2019 Last Posted: 06/19/2019

	B	HR		Fring	e Bene	fit Pay	ments		Irrevo	cable	Total	Overtime
									Fur	ıd	PWR	Rate
			H&W	Pension		Vac.	Annuity	Other				
					Tr.				(*)	(*)		
Class	sification											
Electrician	\$30	0.15	\$6.80	\$8.75	\$0.51	\$0.00	\$3.20	\$0.00	\$0.00	\$0.00	\$49.41	\$64.48
Apprentice												
1st period 0 - 1000 hrs	42.00	\$12.66	\$3.42	\$0.58	\$0.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.88	\$23.21
2nd period 1001-2000 hrs	42.00	\$12.66	\$3.42	\$0.58	\$0.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.88	\$23.21
3rd period 2001-3500 hrs	47.00	\$14.17	\$6.27	\$4.12	\$0.24	\$0.00	\$1.50	\$0.00	\$0.00	\$0.00	\$26.30	\$33.39
4th period 3501-5000 hrs	52.00	\$15.68	\$6.32	\$4.55	\$0.27	\$0.00	\$1.66	\$0.00	\$0.00	\$0.00	\$28.48	\$36.32
5th period 5001-6500 hrs	62.00	\$18.69	\$6.42	\$5.43	\$0.32	\$0.00	\$1.98	\$0.00	\$0.00	\$0.00	\$32.84	\$42.19
6th period 6501-8000 hrs	75.00	\$22.61	\$6.80	\$6.57	\$0.38	\$0.00	\$2.40	\$0.00	\$0.00	\$0.00	\$38.76	\$50.07

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 to 3 Journeymen to 3 Apprentices 4 to 6 Journeymen to 6 Apprentices per job site

Jurisdiction (* denotes special jurisdictional note):

CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, WARREN*

Special Jurisdictional Note : The following townships in Warren County are included: Clearcreek, Franklin and Wayne.

Details:

Only correction made on 6-19-19 was the 5th year Apprentice fb.

Name of Union: Electrical Local 82 Inside Lt Commercial South West

Change #: LCNO1-2019fbLoc82in

Craft: Electrical Effective Date: 09/19/2019 Last Posted: 09/19/2019

	Bl	HR		Fring	ge Bene	fit Pay	ments		Irrevo Fu		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	1										
Electrician	\$30	0.15	\$5.95	\$8.75	\$0.66	\$0.00	\$2.45	\$0.00	\$0.00	\$0.00	\$47.96	\$63.03
CE-3 12,001- 14,000	\$2	1.89	\$5.95	\$0.66	\$0.66	\$0.00	\$0.62	\$0.00	\$0.00	\$0.10	\$29.88	\$40.82
CE-2 10,001- 12,000 Hrs	\$17	7.20	\$5.95	\$0.52	\$0.66	\$0.00	\$0.49	\$0.00	\$0.00	\$0.10	\$24.92	\$33.52
CE-1 8,001- 10,000 Hrs	\$1:	5.64	\$5.95	\$0.47	\$0.66	\$0.00	\$0.44	\$0.00	\$0.00	\$0.10	\$23.26	\$31.08
CW-4 6,001-8,000 Hrs	\$14	4.07	\$5.95	\$0.42	\$0.66	\$0.00	\$0.40	\$0.00	\$0.00	\$0.10	\$21.60	\$28.64
CW-3 4,001-6,000 Hrs	\$12.51		\$5.95	\$0.38	\$0.66	\$0.00	\$0.35	\$0.00	\$0.00	\$0.10	\$19.95	\$26.21
CW-2 2,001-4,000 Hrs	\$1	1.73	\$5.95	\$0.35	\$0.66	\$0.00	\$0.31	\$0.00	\$0.00	\$0.10	\$19.10	\$24.96
CW-1 0-2,000 Hrs	\$10	0.94	\$5.95	\$0.33	\$0.66	\$0.00	\$0.31	\$0.00	\$0.00	\$0.10	\$18.29	\$23.76
Apprentice	Per	cent										
1st period 0 - 1000 hrs	42.00	\$12.66	\$3.42	\$0.20	\$0.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.50	\$22.83
2nd period 1001-2000 hrs	42.00	\$12.66	\$3.42	\$0.20	\$0.22	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$16.50	\$22.83
3rd period 2001-3500 hrs	47.00	\$14.17	\$6.27	\$3.69	\$0.24	\$0.00	\$1.50	\$0.00	\$0.00	\$0.00	\$25.87	\$32.96
4th period 3501-5000 hrs	52.00	\$15.68	\$6.32	\$4.08	\$0.27	\$0.00	\$1.65	\$0.00	\$0.00	\$0.00	\$28.00	\$35.84
	62.00	\$18.69	\$6.42	\$4.87	\$0.32	\$0.00	\$1.96	\$0.00	\$0.00	\$0.00	\$32.26	\$41.61

5th period 5001-6500 hrs											
6th period 6501-8000 hrs	 \$22.61	\$6.80	\$5.89	\$0.38	\$0.00	\$2.40	\$0.00	\$0.00	\$0.00	\$38.08	\$49.39

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 to 3 Journeymen to 3 Apprentices 4 to 6 Journeymen to 6 Apprentices per job site

Construction Electrician and Construction Wireman Ratio There shall be a minimum ratio of one inside Journeyman to every (4) employees of different classification per jobsite. An inside Journeyman Wireman is required on the project as the fifth (5th) worker or when apprentices are used. Jurisdiction (* denotes special jurisdictional note):

CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, WARREN*

Special Jurisdictional Note : The following townships in Warren County are included: Clearcreek, Franklin and Wayne.

The scope of work for the light commercial agreement shall apply to the following facilities not to exceed 200,000 square feet; office buildings, shopping centers, auto sales agencies and garages, churches, funeral homes, nursing homes, hotels, retail and wholesale facilities, small stand-alone manufacturing facilities when free standing and not part of a larger facility (not to exceed 50,000 square fee), solar projects (500 panels or less) unless otherwise covered under the agreement, lighting retrofits (when not associated with remodels involving branch re-circuiting) lighting retrofits shall be defined as the changing of lamps and ballasts in existing light fixtures and shall also include the one for one replacement of existing fixtures, warehouses, gas stations, food service centers, restaurants, entertainment facilities, hospitals, clinics, motels, residential buildings.

Name of Union: Electrical Local 82 Lightning Rod

Change #: LCR02-2018fbLoc82

Craft: Electrical Effective Date: 12/03/2018 Last Posted: 11/14/2018

	BHR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate	
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)			
Clas	sification											
Electrical Lightning Rod Technican	\$29.79	\$6.80	\$8.74	\$0.00	\$0.00	\$3.20	\$0.00	\$0.00	\$0.00	\$48.53	\$63.43	

Special Calculation Note : No Apprentice approved by OSAC.

Ratio : Jurisdiction (* denotes special jurisdictional note) :

CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, WARREN*

Special Jurisdictional Note : The following townships in Warren County are included: (Clearcreek, Franklin and Wayne)

Details:

https://wagehour.com.ohio.gov/w3/Webwh.nsf/\$docUniqIDAll/852565B80070693285257... 4/24/2019

Name of Union: Electrical Local 82 Voice Data Video

Change #: LCR05-2018fbLoc82VDV

Craft: Voice Data Video Effective Date: 11/28/2018 Last Posted: 11/28/2018

	BHR		Fring	ge Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classi	ification										
Electrical Installer Technician A	\$24.35	\$6.10	\$0.73	\$0.46	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$35.64	\$47.82
Electrical Installer Technician B	\$23.13	\$6.10	\$0.69	\$0.44	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$34.36	\$45.92
JW Installer Technician	\$21.92	\$6.10	\$0.66	\$0.42	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$33.10	\$44.06
NON BICSI Installer	\$15.83	\$3.00	\$0.47	\$0.30	\$0.00	\$2.00	\$0.00	\$0.00	\$0.00	\$21.60	\$29.51
Apprentice Indentured Before 09-03-2018											
1st Period 0-800 Hrs	\$12.18	\$6.10	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$19.13	\$25.22
2nd Period 801-1600 Hrs	\$12.18	\$6.10	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$19.13	\$25.22
3rd Period 1601-2400 Hrs	\$14.61	\$6.10	\$0.44	\$0.28	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$25.43	\$32.74
4th Period 2401-3200 Hrs	\$15.83	\$6.10	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.70	\$34.61
5th Period 3201-4000 Hrs	\$17.05	\$6.10	\$0.51	\$0.32	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$27.98	\$36.51
6th Period 4001 Hours	\$18.26	\$6.10	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.26	\$38.39
Cable Puller	\$12.18	\$3.00	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.03	\$22.12
	Percent										

Apprentice Indentured After 09- 04-2018												
1st 0-1000 hours	55.00	\$13.39	\$3.00	\$0.39	\$0.25	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$17.28	\$23.98
2nd 1001- 2000 hours	55.00	\$13.39	\$3.00	\$0.39	\$0.25	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$17.28	\$23.98
3rd 2001- 3000 hours	65.00	\$15.83	\$6.00	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.60	\$34.51
4th 3001- 4000 hours	65.00	\$15.83	\$6.00	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.60	\$34.51
5th 4001- 5000 hours	75.00	\$18.26	\$6.03	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.19	\$38.32
6th 5001- 6000 hours	75.00	\$18.26	\$6.03	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.19	\$38.32
7th 6001- 7000 hours	80.00	\$19.48	\$6.04	\$0.58	\$0.37	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$30.47	\$40.21
8th 7001 hours	80.00	\$19.48	\$6.04	\$0.58	\$0.37	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$30.47	\$40.21
Cable Puller	50.00	\$12.18	\$3.00	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.02	\$22.11

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 Journeymen to 2 Apprentice (Indentured After 9-4-2018)

1 Journeymen to 1 Apprentice (Indentured Before 9--03-2018)

Jurisdiction (* denotes special jurisdictional note):

CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, WARREN*

Special Jurisdictional Note : The following townships in Warren County are included: (Clearcreek, Franklin and Wayne)

Details:

Work covered but not limited to: installation which utilize transmission and/or transference of voice, sound, vision or digital for commercial, education, security and entertainment purposes for the following:

TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multimedia, multiplex, nurse call system, radio page, school intercom, sound and low voltage master clock systems.

Fire Alarm work is excluded on all new construction sites or wherever the fire alarm system is installed in conduit.

All HVAC control work is not covered by this wage rate but by the Inside Electrical wage rate.

Name of Union: Electrical Local 648 Inside

Change #: LCN01-2019fbLoc648in

Craft: Electrical Effective Date: 09/11/2019 Last Posted: 09/11/2019

	Bl	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	l										
Electrician	\$30	0.00	\$7.10	\$8.90	\$0.45	\$0.00	\$2.50	\$0.90	\$0.00	\$0.00	\$49.85	\$64.85
Apprentice	Per	cent										
1st period 0-1000 hrs	45.00	\$13.50	\$4.07	\$0.00	\$0.20	\$0.00	\$2.50	\$0.41	\$0.00	\$0.00	\$20.68	\$27.43
2nd period 1001- 2000 hrs	45.00	\$13.50	\$4.07	\$0.00	\$0.20	\$0.00	\$2.50	\$0.41	\$0.00	\$0.00	\$20.68	\$27.43
3rd period 2001- 3500 hrs	50.00	\$15.00	\$7.10	\$4.45	\$0.23	\$0.00	\$2.50	\$0.45	\$0.00	\$0.00	\$29.73	\$37.23
4th period 3501- 5000 hrs	55.00	\$16.50	\$7.10	\$4.90	\$0.25	\$0.00	\$2.50	\$0.50	\$0.00	\$0.00	\$31.75	\$40.00
5th period 5001- 6500 hrs	62.00	\$18.60	\$7.10	\$5.52	\$0.28	\$0.00	\$2.50	\$0.56	\$0.00	\$0.00	\$34.56	\$43.86
6th period 6501- 8000 hrs	71.00	\$21.30	\$7.10	\$6.32	\$0.32	\$0.00	\$2.50	\$0.64	\$0.00	\$0.00	\$38.18	\$48.83

Special Calculation Note : Other is NEBF (National Electrical Benifit Fund.)

Ratio : Jurisdiction (* denotes special jurisdictional note) :

- 3 Journeyman to 2 Apprentices or fraction thereof: BUTLER, WARREN*
- 1-3 Journeymen to 2 Apprentice
- 4-6 Journeymen to 4 Apprentice
- 7-9 Journeymen to 6 Apprentice

first person assigned to any job site shall be a journeyman

Special Jurisdictional Note : In Warren County the following townships are included: (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union, and Washington)

Details:

Electricians while splicing cable shall receive \$.50 an hour above the regular electrical rate.

All work that requires the use of gas masks or respirators, shall be paid 50% above the appropriate rate of pay. Work up to & including 40 feet shall be paid \$.50 over the journeyman rate. All work from a Boatswain Chair, Swinging Scaffold, or Barrel shall be at double the Journeyman rate. Workmen required to work 50 feet or more below the surface of the earth will be paid 50% above the Journeyman rate.

Name of Union: Electrical Local 648 Lt Commercial South West

Change #: LCN02-2018fbLoc648in

Craft: Electrical Effective Date: 01/01/2019 Last Posted: 12/28/2018

	В	HR		Fring	ge Bene	fit Pay	ments		Irrevo Fu		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	1										
Electrician	\$30	0.00	\$6.45	\$8.90	\$0.45	\$0.00	\$2.00	\$0.90	\$0.00	\$0.00	\$48.70	\$63.70
CE-3 12,001- 14,000 Hrs	\$2	1.89	\$5.95	\$0.66	\$0.66	\$0.00	\$0.64	\$0.48	\$0.00	\$0.00	\$30.28	\$41.22
CE-2 10,001- 12,000 Hrs	\$1	7.20	\$5.95	\$0.52	\$0.66	\$0.00	\$0.66	\$0.48	\$0.00	\$0.00	\$25.47	\$34.07
CE-1 8,001- 10,000 Hrs	\$1:	5.64	\$5.95	\$0.47	\$0.66	\$0.00	\$0.52	\$0.48	\$0.00	\$0.00	\$23.72	\$31.54
CW-4 6,001-8,000 Hrs	\$14	4.07	\$5.95	\$0.42	\$0.66	\$0.00	\$0.42	\$0.48	\$0.00	\$0.00	\$22.00	\$29.04
CW-3 4,001-6,000 Hrs	\$12	2.51	\$5.95	\$0.38	\$0.66	\$0.00	\$0.38	\$0.48	\$0.00	\$0.00	\$20.36	\$26.61
CW-2 2,001-4,000 Hrs	\$1	1.73	\$5.95	\$0.35	\$0.66	\$0.00	\$0.35	\$0.48	\$0.00	\$0.00	\$19.52	\$25.39
CW-1 0-2,000 Hrs	\$10	0.94	\$5.95	\$0.33	\$0.66	\$0.00	\$0.33	\$0.48	\$0.00	\$0.00	\$18.69	\$24.16
Apprentice Indentured AFTER 9/1/2006	Per	cent										
1st period 0-1000 hrs	45.00	\$13.50	\$3.42	\$0.00	\$0.20	\$0.00	\$2.00	\$0.41	\$0.00	\$0.00	\$19.53	\$26.28
2nd period 1001- 2000 hrs	45.00	\$13.50	\$3.42	\$0.00	\$0.20	\$0.00	\$2.00	\$0.41	\$0.00	\$0.00	\$19.53	\$26.28
3rd period 2001- 3500 hrs	50.00	\$15.00	\$6.45	\$4.45	\$0.23	\$0.00	\$2.00	\$0.45	\$0.00	\$0.00	\$28.58	\$36.08
	55.00	\$16.50	\$6.45	\$4.90	\$0.25	\$0.00	\$2.00	\$0.50	\$0.00	\$0.00	\$30.60	\$38.85

4th period 3501- 5000 hrs												
5th period 5001- 6500 hrs	62.00	\$18.60	\$6.45	\$5.52	\$0.28	\$0.00	\$2.00	\$0.56	\$0.00	\$0.00	\$33.41	\$42.71
6th period 6501- 8000 hrs	71.00	\$21.30	\$6.45	\$6.32	\$0.32	\$0.00	\$2.00	\$0.64	\$0.00	\$0.00	\$37.03	\$47.68

Special Calculation Note : Other is for NEBF (National Electrical Benifit Fund)

Ratio:

1-3 Journeymen to 2 Apprentice

4-6 Journeymen to 4 Apprentice

7-9 Journeymen to 6 Apprentice first person assigned to any job site shall be a journeyman

Construction Electrician and Construction Wireman Ratio There shall be a minimum ratio of one inside Journeyman to every (4) employees of different classification per jobsite. An inside Journeyman Wireman is required on the project as the fifth (5th) worker or when apprentices are used Jurisdiction (* denotes special jurisdictional note):

BUTLER, WARREN*

Special Jurisdictional Note: In Warren County the following townships are included: (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union, and Washington)

The scope of work for the light commercial agreement shall apply to the following facilities not to exceed 200,000 square feet; office buildings, shopping centers, auto sales agencies and garages, churches, funeral homes, nursing homes, hotels, retail and wholesale facilities, small stand-alone manufacturing facilities when free standing and not part of a larger facility (not to exceed 50,000 square fee), solar projects (500 panels or less) unless otherwise covered under the agreement, lighting retrofits (when not associated with remodels involving branch re-circuiting) lighting retrofits shall be defined as the changing of lamps and ballasts in existing light fixtures and shall also include the one for one replacement of existing fixtures, warehouses, gas stations, food service centers, restaurants, entertainment facilities, hospitals, clinics, motels, residential buildings.

Details:

Electricians while splicing cable shall receive \$.50 an hour above the regular electrical rate.

All work that requires the use of gas masks or respirators, shall be paid 50% above the appropriate rate of pay. Work up to & including 40 feet shall be paid \$.50 over the journeyman rate. All work from a Boatswain Chair, Swinging Scaffold, or Barrel shall be at double the Journeyman rate. Workmen required to work 50 feet or more below the surface of the earth will be paid 50% above the Journeyman rate.

Name of Union: Electrical Local 648 Voice Date Video

Change #: LCR02-2018fbLoc648VDV

Craft: Voice Data Video Effective Date: 11/28/2018 Last Posted: 11/28/2018

	BHR	CO LIIC		ge Bene				Irrevo Fu	cable	Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification										
Electrical Installer Technician A	\$24.35	\$6.10	\$0.73	\$0.46	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$35.64	\$47.82
Electrical Installer Technician B	\$23.13	\$6.10	\$0.69	\$0.44	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$34.36	\$45.92
JW Installer Technician B	\$21.92	\$6.10	\$0.66	\$0.42	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$33.10	\$44.06
Non BICSI Installer	\$15.83	\$3.00	\$0.47	\$0.30	\$0.00	\$2.00	\$0.00	\$0.00	\$0.00	\$21.60	\$29.51
Apprentice Indentured AFTER 09- 03-2018											
1 st Period 0-800 Hrs	\$13.14	\$3.00	\$0.38	\$0.25	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$17.02	\$23.59
2nd Period 801-1600 Hrs	\$13.14	\$3.00	\$0.38	\$0.25	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$17.02	\$23.59
3rd Period 1601-2400 Hrs	\$15.83	\$6.00	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.60	\$34.52
4th Period 2401-3200 Hrs	\$15.83	\$6.00	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.60	\$34.52
5th Period 3201-4000 Hrs	\$18.26	\$6.03	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.19	\$38.32
6th Period 4001-4800 Hrs	\$18.26	\$6.03	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.19	\$38.32

7th Period 4801-5600 Hrs	\$19.48		\$8.04	\$0.58	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$32.40	\$42.14
8th Period 5601-6400	\$19	9.48	\$8.04	\$0.58	\$0.37	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$32.47	\$42.21
Cable Puller	\$12	2.18	\$3.00	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.03	\$22.12
Apprentice Indentured PRIOR to 09-03-2018												
1st period 0-800 hrs	50.00	\$12.18	\$6.10	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$19.12	\$25.21
2nd period 801-1600 hrs	50.00	\$12.18	\$6.10	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$19.12	\$25.21
3rd period 1601-2400 hrs	60.00	\$14.61	\$6.10	\$0.44	\$0.28	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$25.43	\$32.74
4th period 2401-3200 hrs	65.00	\$15.83	\$6.10	\$0.47	\$0.30	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$26.70	\$34.61
5th period 3201-4000 hrs	70.00	\$17.04	\$6.10	\$0.51	\$0.32	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$27.97	\$36.50
6th period 4001-4800 hrs	75.00	\$18.26	\$6.10	\$0.55	\$0.35	\$0.00	\$4.00	\$0.00	\$0.00	\$0.00	\$29.26	\$38.39
Cable Puller	50.00	\$12.18	\$3.00	\$0.37	\$0.23	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$16.02	\$22.11

Special Calculation Note:

Ratio:

Jurisdiction (* denotes special jurisdictional note):

1Technician to 1 Apprentice

BUTLER, WARREN*

Special Jurisdictional Note : The following townships In Warren County are included: (Deerfield, Hamilton, Harlan, Massie, Salem, Turtle Creek, Union, and Washington)

Details:

The following work is excluded from the Teledata Technician work scope:

- *The installation of computer systems in industrial applications such as assembly lines, robotics, computer controller manufacturing systems.
- *The installation of conduit and/or raceways shall be installed by Inside Wireman. On sites where there is no Inside Wireman employed, the

Teledata Technician may install raceway or conduit not greater than 10 ft.

- *Fire Alarm work is excluded on all new construction sites or wherever the fire alarm system is installed in conduit
- *All HVAC control work.

Name of Union: Elevator Local 11

Change # : LCN01-2019fbLoc11

Craft: Elevator Effective Date: 01/09/2019 Last Posted: 01/09/2019

	BHR		Fringe Benefit Payments						Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classi	ification											
Elevator Mechanic	\$4:	5.73	\$15.58	\$9.96	\$0.62	\$3.66	\$7.55	\$1.46	\$0.00	\$0.00	\$84.56	\$107.42
Probationary Apprentice	50.00	\$22.86	\$0.00	\$0.00	\$0.00	\$1.37	\$0.00	\$0.73	\$0.00	\$0.00	\$24.96	\$36.40
1st year	55.00	\$25.15	\$15.58	\$9.96	\$0.62	\$1.51	\$7.55	\$0.80	\$0.00	\$0.00	\$61.17	\$73.75
2nd year	65.00	\$29.72	\$15.58	\$9.96	\$0.62	\$1.78	\$7.55	\$0.95	\$0.00	\$0.00	\$66.16	\$81.03
3rd year	70.00	\$32.01	\$15.58	\$9.96	\$0.62	\$1.92	\$7.55	\$1.02	\$0.00	\$0.00	\$68.66	\$84.67
4th year	80.00	\$36.58	\$15.58	\$9.96	\$0.62	\$2.19	\$7.55	\$1.17	\$0.00	\$0.00	\$73.65	\$91.95
Helper	70.00	\$32.01	\$15.58	\$9.96	\$0.62	\$1.92	\$7.55	\$1.02	\$0.00	\$0.00	\$68.66	\$84.67
Assistant Mechanic	80.00	\$36.58	\$15.58	\$9.96	\$0.62	\$2.19	\$7.55	\$1.17	\$0.00	\$0.00	\$73.65	\$91.95

Special Calculation Note: Other is Holiday Pay. Vacation calcuated at 6%.

Ratio:

The total number of Helpers & Apprentices employed shall not exceed the number of Mechanics on any one job, except on jobs where (2) teams or more are working, (1) extra Helper or PREBLE, SCIOTO, SHELBY, WARREN Apprentice may be employed for the first (2) teams and an extra Helper or Apprentice for each additional (3) teams.

- 1 Journeymen to 1 Apprentice
- 2 Journeymen to 5 Apprentice
- 3 Journeymen to 6 Apprentice

Special Jurisdictional Note:

Details:

Jurisdiction (* denotes special jurisdictional note):

ADAMS, BROWN, BUTLER, CLERMONT, CLINTON, DARKE, GREENE, HAMILTON, HIGHLAND, MIAMI, MONTGOMERY,

Name of Union: Glazier Local 387

Change #: LCN02-2019fbLoc387

Craft: Glazier Effective Date: 08/28/2019 Last Posted: 08/28/2019

	BHR			Fringe Benefit Payments						cable id	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Glazier	\$20	6.73	\$5.47	\$9.00	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.45	\$54.82
Apprentice	Per	cent										
1st 6 months	56.10	\$15.00	\$5.47	\$0.00	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$20.72	\$28.21
2nd 6 months	65.00	\$17.37	\$5.47	\$5.09	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28.18	\$36.87
3rd 6 months	70.00	\$18.71	\$5.47	\$5.61	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.04	\$39.40
4th 6 months	75.00	\$20.05	\$5.47	\$5.75	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.52	\$41.54
5th 6 months	80.00	\$21.38	\$5.47	\$6.33	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$33.43	\$44.13
6th 6 months	85.00	\$22.72	\$5.47	\$6.47	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.91	\$46.27
7th 6 months	90.00	\$24.06	\$5.47	\$6.99	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.77	\$48.80
8th 6 months	95.00	\$25.39	\$5.47	\$7.58	\$0.25	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.69	\$51.39

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

Each employer may employ and train Apprentices in ADAMS, BROWN, BUTLER, CHAMPAIGN, the following ratio to journeymen workers employed. CLARK, CLERMONT, CLINTON, DARKE, 1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):

FAYETTE*, GREENE, HAMILTON, HIGHLAND, MIAMI, MONTGOMERY, PREBLE, SHELBY*, **WARREN**

Special Jurisdictional Note: Fayette County: Eastern portion of route #41 being the dividing line between locals 372 and 387. Local 387 has jurisdiction of projects built on property which borders route #41 East. Shelby County: Southern portion of routes #47 & 29.

Name of Union: Ironworker Local 44

Change #: LCNO1-2019fbLoc44

Craft: Ironworker Effective Date: 06/05/2019 Last Posted: 06/05/2019

Crait : Ironwork		HR				fit Pay		-	Irrevo Fur	cable	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classificatio	n											
Ironworker Reinforcing	\$29	9.87	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.36	\$66.29
Structural	\$29	9.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Ornamental	\$29	9.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Machine Mover/Rigger	\$29	9.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Conveyer Mechanic	\$29	9.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Maintenance/Heavy Hwy	\$29	9.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Welder A	\$29	9.62	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.11	\$65.92
Welder B	\$29	9.87	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$51.36	\$66.29
Sheeter	\$29	9.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Fence Erector	\$27	7.90	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$49.39	\$63.34
Ironworker	\$29	9.37	\$8.20	\$9.50	\$0.60	\$0.00	\$3.00	\$0.19	\$0.00	\$0.00	\$50.86	\$65.54
Apprentice	Per	cent										
Apprentice												
1st yr A	55.00	\$16.43	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$35.67	\$43.88
1st yr B	60.00	\$17.92	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$37.16	\$46.12
1st yr C	65.00	\$19.42	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$38.66	\$48.36
2nd yr A	70.00	\$20.91	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$40.15	\$50.60
2nd yr B	75.00	\$22.40	\$8.20	\$9.50	\$0.60	\$0.00	\$0.75	\$0.19	\$0.00	\$0.00	\$41.64	\$52.84
3rd yr A	80.00	\$23.90	\$8.20	\$9.50		\$0.00	\$1.50	\$0.19	\$0.00	\$0.00	\$43.89	\$55.83
3rd yr B	85.00	\$25.39	\$8.20	\$9.50	\$0.60	\$0.00	\$1.50	\$0.19	\$0.00	\$0.00	\$45.38	\$58.07
4th yr A	90.00	\$26.88	\$8.20	\$9.50	\$0.60	\$0.00	\$2.25	\$0.19	\$0.00	\$0.00	\$47.62	\$61.06
4th yr B	95.00	\$28.38	\$8.20	\$9.50		\$0.00	\$2.25	\$0.19	\$0.00	\$0.00	\$49.12	\$63.30
4th yr C	100.00	\$29.87	\$8.20	\$9.50	\$0.60	\$0.00	\$2.25	\$0.19	\$0.00	\$0.00	\$50.61	\$65.54

Special Calculation Note: Other is Impact Fund Training

Ratio: Jurisdiction (* denotes special iurisdictional note):

ADAMS*, BROWN, BUTLER*, CLERMONT, 1 Journeymen to 1 Apprentice

2 Journeymen to 2 Apprentice CLINTON*, HAMILTON, HIGHLAND*, 10 Journeymen to 4 Apprentices WARREN*

Special Jurisdictional Note: Adams County Twps included: Bratton, Scott, Winchester, Wayne. Butler County Twps included: Oxford, St. Clair, Fairfield, Morgan, Liberty, Union, Ross, Reily, Hanover, West Chester, In Clinton County, Manchester and South West Borrow. Highland County Twps included: Dotson, Salem, Clay, White Oak, Hamer, New Market, Concord, Jackson, Washington. Warren County Twps included: Harlan, Deerfield, Hamilton.

Details:

Structural Iron Work but not limited to: field fabrication, all loading to and including the erecting, rigging, assembly, dismantling, placing, temporary and permanent securing by any means of all structural iron, steel, ornamental lead, bronze, brass, copper, aluminum, glass all ferrous and non ferrous metal and composite material, precast prestressed and post-stressed concrete structures. Bridges and bridge rails, bridge viaducts, bucks bulkheads, bumper and bumper post, canopies and unistrut canopies, corrugated ferrous and non ferrous sheets when attached to steel frames, columns, beams, bar-joists, trusses, grinders, roof decking, electrical supports, elevator cars, elevator fronts and enclosures, erection of steel towers, flag poles, gymnasium equipment, stadium and arena seating, jail cell work, jail cell beds, benches, bunks, chairs, tables, mirrors, jail cell access doors, rigging and installation of machinery and equipment (erecting, aligning, anchoring and dismantling, erection and dismantling of tower cranes, derrick monorail systems, Chicago booms, overhead cranes, gantries, material and personnel hoists, tanks, hoppers and conveyors. All preengineered metal buildings and their entirety including siding, roofing, gutters, downspouts and erection of all.

Ornamental Iron Work but not limited to:all work in connection with field fabrication, handling including loading/off

loading, sorting, cutting, fastening, anchoring, bending, hoisting, placing, burning, welding, and tying dismantling of all materials used in miscellaneous iron or steel, for stairs hand railings rolling doors, rolling gates, rolling shutters, fence, windows, curtain wall, erection and welding of all metal, sash, architectural and ornamental treatments, but not necessarily limited to all sizes and types of ornamental, steel iron, lead, bronze, brass, copper, aluminum, all ferrous and non ferrous metals and composite materials

Fence Erector Iron Worker but not limited to: All work in connection with the field fabrication and erection of chain link fence, which includes but not limited to the loading and of the fence fabric and posts also the installation of the above.

Name of Union: Ironworker Local 290

Change # : LCN01-2019fbLoc290

Craft: Ironworker Effective Date: 06/01/2019 Last Posted: 05/23/2019

	В	HR		Fring	e Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	1										
Ironworker Structural	\$25	9.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Welder	\$29	9.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Fence Erector	\$25	9.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Reinforcing Rods	\$25	9.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Machinery Mover	\$29.23		\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Sheeter	\$29	9.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Metal Building Erector	\$29	9.23	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.60	\$66.21
Rigger & Erector	\$29	9.29	\$8.20	\$9.50	\$0.65	\$0.00	\$4.00	\$0.02	\$0.00	\$0.00	\$51.66	\$66.30
Apprentice	Per	cent										
1st year	65.15	\$19.04	\$8.20	\$9.50	\$0.65	\$0.00	\$2.50	\$0.02	\$0.00	\$0.00	\$39.91	\$49.44
2nd year	75.15	\$21.97	\$8.20	\$9.50	\$0.65	\$0.00	\$2.50	\$0.02	\$0.00	\$0.00	\$42.84	\$53.82
3rd year	85.15	\$24.89	\$8.20	\$9.50	\$0.65	\$0.00	\$2.50	\$0.02	\$0.00	\$0.00	\$45.76	\$58.20
4th year	95.15	\$27.81	\$8.20	\$9.50	\$0.65	\$0.00	\$2.50	\$0.02	\$0.00	\$0.00	\$48.68	\$62.59

Special Calculation Note: Other is for Industry Fund.

Ratio:

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):

ALLEN*, AUGLAIZE, BUTLER*, CHAMPAIGN*, CLARK, CLINTON, DARKE, FAYETTE*, GREENE, HARDIN*, HIGHLAND*, LOGAN*, MADISON*, MERCER*, MIAMI, MONTGOMERY, PREBLE, SHELBY, VAN WERT*, WARREN*

Special Jurisdictional Note: Allen County Twps included are: Auglaize, Perry, Shawnee,

Amanda, Spencer, Marion, Sugar Creek, American, Bath, Jackson. Butler County Twps included are: Milford, Wayne, Madison, Lemon. Champaign Cnty Twps included are: Union, Urbana, Jackson, Concord, Salem, Mad River, Johnson, Harrison, Adams. Fayette County Twps included are: Green, Jasper, Concord, Jefferson. Hardin County Twps included are: Round Head, Marion, Liberty. Highland County Twps included are: Fairfield, Penn, Union, Marshall, Liberty, Paint, Brush Creek. Logan County Twps included are: Richland, Stokes, Bloomfield, Washington, Harrison, McArthur, Lake, Liberty, Pleasant, Miami. Madison County Twps included are: Stokes. Mercer County Twps included are: Dublin, Washington, Jefferson, Recovery, Gibson, Union, Liberty, Butler, Granville, Center, Hopewell, Franklin, Marion. VanWert County Twps included are: Jennings. Warren County Twps included are: Franklin, Clear Creek, Turtle Creek, Wayne, Massie, Washington, Salem, Union.

Details:

Structural Iron Work but not limited to:field fabrication, all loading to and including the erecting,rigging,assembly,dismantling, placing, temporary and permanent securing by any means of all structural iron,steel,ornamental lead,bronze,brass,copper,aluminum,glass all ferrous and non ferrous metal and composite material, precast prestressed and post-stressed concrete structures. Bridges and bridge rails,bridge viaducts,bucks bulkheads,bumper and bumper post,canopies and unistrut canopies,corrugated ferrous and non ferrous sheets when attached to steel frames,columns,beams,bar-joists,trusses,grinders,roof decking,electrical supports,elevator cars,elevator fronts and enclosures,erection of steel towers,flag poles, gymnasium equipment,stadium and arena seating,jail cell work,jail cell beds,benches,bunks,chairs,tables,mirrors,jail cell access doors,rigging and installation of machinery and equipment(erecting,aligning,anchoring and dismantling, erection and dismantling of tower cranes,derrick monorail systems, Chicago booms,overhead cranes,gantries,material and personnel hoists,tanks,hoppers and conveyors. All preengineered metal buildings and their entirety including siding,roofing, gutters, downspouts and erection of all.

Ornamental Iron Work but not limited to:all work in connection with field fabrication, handling including loading/off

loading, sorting, cutting, fastening, anchoring, bending, hoisting, placing, burning, welding, and tying, dismantling of all materials used in miscellaneous iron or steel, for stairs, hand railings, rolling doors, rolling gates, rolling shutters, fence, windows, curtain wall, erection and welding of all metal, sash, architectural and ornamental treatments, but not necessarily limited to all sizes and types of ornamental, steel iron, lead, bronze, brass, copper, aluminum, all ferrous and non ferrous metals and composite materials

Fence Erector Iron Worker but not limited to: All work in connection with the field fabrication and erection of chain link fence, which includes but not limited to the loading and of the fence fabric and posts also the installation of the above.

Name of Union: Labor HevHwy 3

Change #: LCN01-2019fbLocalHevHwy3

Craft: Laborer Group 1 Effective Date: 05/23/2019 Last Posted: 05/23/2019

	BI	IR		Fring	ge Bene	fit Payı	ments		Irrevo Fur	- 1	Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Laborer Group 1	\$31	.62	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$42.87	\$58.68
Group 2	\$31	.79	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$43.04	\$58.94
Group 3	\$32	2.12	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$43.37	\$59.43
Group 4	\$32	2.57	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$43.82	\$60.11
Watch Person	\$24.35		\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$35.60	\$47.78
Apprentice	Per	cent										
0-1000 hrs	60.00	\$18.97	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$30.22	\$39.71
1001-2000 hrs	70.00	\$22.13	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$33.38	\$44.45
2001-3000 hrs	80.00	\$25.30	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$36.55	\$49.19
3001-4000 hrs	90.00	\$28.46	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.71	\$53.94
More than 4000 hrs	100.00	\$31.62	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$42.87	\$58.68

Special Calculation Note : Watchmen have no Apprentices. Tunnel Laborer rate with air-pressurized add \$1.00 to the above wage rate.

Ratio:

- 1 Journeymen to 1 Apprentice
- 3 Journeymen to 1 Apprentice thereafter

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, MADISON, MARION, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, RICHLAND, ROSS, SCIOTO, SENECA, SHELBY,

TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, **WYANDOT**

Special Jurisdictional Note: Hod Carriers and Common Laborers - Heavy, Highway, Sewer, Waterworks, Utility, Airport, Railroad, Industrial and Building Site, Sewer Plant, Waste Water Treatment Facilities Construction

Details:

Group 1

Laborer (Construction); Plant Laborer or Yardman, Right-of-way Laborer, Landscape Laborer, Highway Lighting Worker, Signalization Worker, (Swimming) Pool Construction Laborer, Utility Man, *Bridge Man, Handyman, Joint Setter, Flagperson, Carpenter Helper, Waterproofing Laborer, Slurry Seal, Seal Coating, Surface Treatment or Road Mix Laborer, Riprap Laborer & Grouter, Asphalt Laborer, Dump Man (batch trucks), Guardrail & Fence Installer, Mesh Handler & Placer, Concrete Curing Applicator, Scaffold Erector, Sign Installer, Hazardous Waste (level D), Diver Helper, Zone Person and Traffic Control.

*Bridge Man will perfomr work as per the October 31, 1949, memorandum on concrete forms, byand between the United Brotherhood of Caprpenters and Joiners of Americ and the Laborers' International Union of North America, which states in; "the moving, cleaning, oiling and carrying to the next point of erection, and the stripping of forms which are not to be re-used, and forms on all flat arch work shall be done by members of the Laborers' International Union of North America."

Group 2

Asphalt Raker, Screwman or Paver, Concrete Puddler, Kettle Man (pipeline), All Machine-Driven Tools (Gas, Electric, Air), Mason Tender, Brick Paver, Mortar Mixer, Skid Steer, Sheeting & Shoring Person, Surface Grinder Person, Screedperson, Water Blast, Hand Held Wand, Power Buggy or Power Wheelbarrow, Paint Striper, Plastic fusing Machine Operator, Rodding Machine Operator, Pug Mill Operator, Operator of All Vacuum Devices Wet or Dry, Handling of all Pumps 4 inches and under (gas, air or electric), Diver, Form Setter, Bottom Person, Welder Helper (pipeline), Concrete Saw Person, Cutting with Burning Torch, Pipe Layer, Hand Spiker (railroad), Underground Person (working in sewer and waterline, cleaning, repairing and reconditioning). Tunnel Laborer (without air), Caisson, Cofferdam (below 25 feet deep), Air Track and Wagon Drill, Sandblaster Nozzle Person, Hazardous Waste (level B), ***Lead Abatement, Hazardous Waste (level C)

***Includes the erecting of structures for the removal, including the encapsulation and containment of Lead abatement process.

Group 3

Blast and Powder Person, Muckers will be defined as shovel men working directly with the miners, Wrencher (mechanical joints & utility pipeline), Yarner, Top Lander, Hazardous Waste (level A), Concrete Specialist, Curb Setter and Cutter, Grade Checker, Concrete Crew in Tunnels. Utility pipeline Tappers, Waterline, Caulker, Signal Person will receive the rate equal to the rate paid the Laborer classification for which the Laborer is signaling.

Group 4

Miner, Welder, Gunite Nozzle Person

A.) The Watchperson shall be responsible to patrol and maintain a safe traffic zone including but not limited to barrels, cones, signs, arrow boards, message boards etc.

The responsibility of a watchperson is to see that the equipment, job and office trailer etc. are secure.

Name of Union: Labor Local 534 Building

Change #: LCNO1-2019fbLoc534

Craft: Laborer Effective Date: 06/01/2019 Last Posted: 05/23/2019

	BI	łR		Fring	e Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Laborer Group 1	\$27	7.59	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$38.84	\$52.64
Laborer Group 2	\$27	7.69	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$38.94	\$52.79
Laborer Group 3	\$27	7.79	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.04	\$52.94
Laborer Group 4	\$27	7.92	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.17	\$53.13
Laborer Group 5	\$28	3.17	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.42	\$53.51
Laborer Group 6	\$27	7.94	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$39.19	\$53.16
Laborer Group 7	\$27	'.14	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$38.39	\$51.96
Apprentice	Per	cent										
0-1000 hrs	60.00	\$16.55	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$27.80	\$36.08
1001-2000 hrs	70.00	\$19.31	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$30.56	\$40.22
2001-3000 hrs	80.00	\$22.07	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$33.32	\$44.36
3001-4000	90.00	\$24.83	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$36.08	\$48.50
4001	100.00	\$27.59	\$7.00	\$3.70	\$0.45	\$0.00	\$0.00	\$0.00	\$0.10	\$0.00	\$38.84	\$52.64

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 Journeman to 1 Apprentice

3 Journeman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):
BUTLER, WARREN

Special Jurisdictional Note:

Details:

Note:

Group 1: Building & Common Laborer; All general laborers work including all forms of landscaping, Rough Rider - all pump's 4 inch or smaller, Small Pump Portable Generators-Bobcat to Cleanup, Firewatch and Monitor, (Safety Person)

Group 2: Asphalt Raker, Tamper, Smoother, Hand Air Pump, Hand air Tamper, Chisel, Power Tamper, Operator, Switch, Assemblies, Handling & Laying Precast Concrete Floors & Deck Tool Repairman.

Group 3: Concrete Specialist; Skid Steers (with attachments to perform Laborer's duties) Jack Hammer * Concrete Busterman, Barco Tamper Man, Power Georgia Buggy Man, Power Sweeper Man, Vibrator, Concrete Saw Man, Rail Spikers, Acetylene Burner, Pipelayers, Bos'n Cradleman, Bottom Man, Chipping Hammer Grade Checker, Radio Operator, Form Cleanout & blowout Man, Red Concrete Coloring Man (Electrical Safety)

Group 4: Mason Tender, Mortar Mixers & Scaffold Builders

Group 5: Fork Lift for Mason, all work involving Refractory Materials Including Demolition of Refractory Materials.

Asbestos Removal and Hazardous Waste Removal (handling, control, removal abatement, encapsulation or disposal of asbestos & hazardous waste),

Group 6: Gunnite Man, Sand Blaster, Concrete & Grout Pump & Hose Man, Blast Trac, Miners & Muckers, Free Air, Powderman or Blaster, Mortar or Gypsum Machineman, Welder, Scuba Diver.

Group 7: Watchman & Tool Checker/Toolroom Man

Name of Union: Operating Engineers - Building Local 18 - Zone III

Change #: LCN01-2019fbLoc18zone3

Craft: Operating Engineer Effective Date: 05/01/2019 Last Posted: 05/01/2019

	B	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	ı										
Operator Class 1	\$3′	7.14	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.34	\$70.91
Class 2	\$3	7.02	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.22	\$70.73
Class 3	\$3:	5.98	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$51.18	\$69.17
Class 4	\$34	4.80	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$50.00	\$67.40
Class 5	\$29	9.34	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.54	\$59.21
Class 6	\$3'	7.39	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.59	\$71.28
Class 7	\$3'	7.64	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.84	\$71.66
Class 8	\$38	8.14	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.34	\$72.41
Class 9	\$38	8.39	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$53.59	\$72.78
Apprentice	Per	cent										
1st Year	50.00	\$18.57	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$33.77	\$43.06
2nd Year	60.00	\$22.28	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$37.48	\$48.63
3rd Year	70.00	\$26.00	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$41.20	\$54.20
4th Year	80.00	\$29.71	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.91	\$59.77
Field Mechanic Trainee												
1st Year	50.00	\$18.57	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$33.77	\$43.06
2nd Year	60.00	\$22.28	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$37.48	\$48.63
3rd Year	70.00	\$26.00	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$41.20	\$54.20
4th Year	80.00	\$29.71	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.91	\$59.77

Special Calculation Note: Other: Education & Safety \$0.09

Ratio:

For every (3) Operating Engineer Journeymen employed by the company there may be employed AUGLAIZE, BELMONT, BROWN, BUTLER, (1) Registered Apprentice or trainee Engineer through the referral when they are available. An apprenice, while employed as part of a crew per

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ATHENS, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCTON, CRAWFORD, DARKE, DEFIANCE,

Article VIII, paragraph 77, will not be subject to the apprenticeship ratios in this collective bargaining agreement DELAWARE, FAIRFIELD, FAYETTE,
FRANKLIN, FULTON, GALLIA, GREENE,
GUERNSEY, HAMILTON, HANCOCK,
HARDIN, HARRISON, HENRY, HIGHLAND,
HOCKING, HOLMES, JACKSON, JEFFERSON,
KNOX, LAWRENCE, LICKING, LOGAN,
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, WYANDOT

Special Jurisdictional Note:

Details:

**Apprentices will receive a 10% increase on top of the percentages listed above provided they are operating mobile equipment. Mechanic Trainees will receive 10% increase if required to have CDL

Class 1 - Barrier Moving Machine; Boiler Operators or Compressor Operators, when compressor or boiler is mounted on crane (Piggyback Operation); Boom Trucks (all types); Cableways Cherry Pickers; Combination - Concrete Mixers & Towers; All Concrete Pumps with Booms; Cranes (all types) Derricks (all types); Draglines Dredges (dipper, clam or suction) 3-man crew; Elevating Graders or Euclid Loaders; Floating Equipment; Gradalls; Helicopter Operators; hoisting building materials; Helicopter Winch Operators, Hoisting building materials; Hoes (All types); Hoists (with two or more drums in use): Hydraulic Gantry (lift system); Laser Finishing Machines; Lift Slab or Panel Jack Operators; Locomotives (all types); Maintenance Engineers (Mechanic and/or Welder); Mixers, paving (multiple drum); Mobile Concrete Pumps, with booms, Panelboards, (all types on site); Pile Drivers; Power Shovels; Prentice Loader; Rail Tamper (with automatic lifting and aligning device); Rotary Drills (all) used on caissons for foundations and sub-structure work; Side Booms; Slip Form Pavers; Straddle Carriers (Building Construction on site); Tug Boats. Horizontal Directional Drill, Rough Terrain Fork-lift with Winch/Hoist, Laser Screed, and Like equipment; Compact Cranes, track or rubber over 4,000 pound capacity, self-erecting cranes: stationary, track or truck (all configurations) bucket trench machines (over 24 " wide).

Class 2 - Asphalt Pavers; Bobcat-type and/or skid steer loader with hoe attachment greater than 7000 lbs. Bulldozers; CMI type Equipment; Endloaders; Hydro Milling Machine; Kolman-type Loaders (Dirt Loading); Lead Greasemen; Mucking Machines; Pettibone-Rail Equipment; Power Graders; Power Scoops; Power Scrapers; Push Cats; Vermeer Type Concrete Saw; All rotomills, grinders & planers of all types. Articulating/end dumps (minus \$4.00/hour from Class 2 rate)

Class 3 - A Frames; Air Compressors, Pressurizing Shafts or Tunnels; All Asphalt Rollers; Bobcattype and/or skid steer loader with or without attachments; Boilers (15 lbs pressure and over); All concrete Pumps (without booms with 5 inch system); Fork Lifts (except masonry); Highway Drillers - all types (with integral power); Hoists (with one drum); House Elevators (except those automatic call button controlled); Man lifts; Mud Jacks; Pressure Grouting; Pump Operators (installing or operating

Well Points or other types of Dewatering Systems); Pumps (4 inches and over discharge); Railroad Tie Inserter/Remover; Rotator (Lime-Soil Stabilizer); Submersible Pumps (4 inches and over discharge); Switch & Tie Tampers (without lifting and aligning device); Trench Machines (24 inches and under); Utility Operators; Material hoist/elevators.

Class 4 - Ballast Re-locator; Backfillers and Tampers; Batch Plant Operators; Bar and Joint Installing Machines; Bull Floats; Burlap and Curing Machines; Clefplanes; Compressors, on building construction; Concrete Spreader; Conveyors, used for handling building materials; Concrete Mixers, one bag capacity (side loader); Concrete Mixers, capacity more than one bag; Crushers; Deck Hands; Drum Fireman (in Asphalt Plant); Farm type tractors pulling attachments; Finishing Machines; Form Trenchers; Generators: Gunite Machines; Hydro-Seeders; Pavement Breakers (hydraulic or cable); Post Drivers; Post Hole Diggers; Pressure Pumps (over 1/2 inch discharge); Road Widening Trenchers; Rollers (except asphalt); All Concrete pumps (without Boom with 4 inch or smaller systems); Self-Propelled Power Spreaders; Concrete Spreaders; Self-Propelled Sub-graders; Shotcrete Machines; Tire Repairmen; Tractors, pulling sheepfoot rollers or graders; VAC/ALLS; Vibratory Compactors, with integral power; Welder Operators.

Class 5 - Boilers (less than 15 lbs. pressure); Inboard/outboard Motor Boat Launches; Light Plant Operators; Masonry Fork Lifts; Oilers/Helpers; Power Driven Heaters (oil fired); Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Signalmen, Submersible Pumps (under 4 inch discharge). Directional Drill Locator and Allen Screed Concrete Paver. Fueling and greasing (plus \$3.00), compact cranes; track or rubber under 4,000 pounds.

Class 6 - Master Mechanic

Class 7 - Boom & Jib 150 - 180 feet

Class 8 - Boom & Jib 180 - 249 feet

Class 9 - Boom & Jib 250 - or over

Name of Union: Operating Engineers - HevHwy Zone II

Change #: LCN01-2019fbLoc18hevhwyll

Craft: Operating Engineer Effective Date: 05/01/2019 Last Posted: 05/01/2019

	В	HR		Fring	e Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	1										
Operator Class 1	\$3	7.14	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.34	\$70.91
Class 2	\$3	7.02	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.22	\$70.73
Class 3	\$3	5.98	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$51.18	\$69.17
Class 4	\$3-	4.80	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$50.00	\$67.40
Class 5	\$2	9.34	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.54	\$59.21
Class 6	\$3	7.39	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$52.59	\$71.28
Apprentice	Per	cent										
1st Year	50.00	\$18.57	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$33.77	\$43.06
2nd Year	60.00	\$22.28	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$37.48	\$48.63
3rd Year	70.00	\$26.00	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$41.20	\$54.20
4th Year	80.00	\$29.71	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.91	\$59.77
Field Mech Trainee Class 2												
1st year	49.85	\$18.51	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$33.71	\$42.97
2nd year	59.79	\$22.21	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$37.41	\$48.51
3rd year	69.77	\$25.91	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$41.11	\$54.07
4th year	79.75	\$29.62	\$8.26	\$6.00	\$0.85	\$0.00	\$0.00	\$0.09	\$0.00	\$0.00	\$44.82	\$59.63

Special Calculation Note: Other: Education & Safety Fund is \$0.09 per hour.

Ratio:

For every (3) Operating Engineer Journeymen employed by the company, there may be employed (1) Registered Apprentice or Trainee Engineer through the referral when they are available. An apprentice, while employed as part of a crew per Article VIII paragraph 65, will not be subject the apprenticeship ratios in this collective bargaining agreement.

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COSHOCTON, 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, WYANDOT

Special Jurisdictional Note:

Details:

**Apprentices will receive a 10% increase on top of the percentages listed above provided they are operating mobile equipment. Mechanic Trainees will receive 10% increase if they are required to have CDL.

Class 1 - Air Compressors on Steel Erection; Barrier Moving Machine; Boiler Operators, on Compressors or Generators, when mounted on a rig: Cableways, Combination Concrete mixers & Towers; Concrete Pumps; Concrete Plants (over 4 yd capacity); Cranes (all types, including Boom Trucks, Cherry Pickers); Derricks; Draglines, Dredgers (dipper, clam or suction); Elevating Graders or Euclid Loaders; Floating Equipment (all types); Gradalls, Helicopter Crew (Operator- hoist or winch); Hoes (all types); Hoisting Engines, on shaft or tunnel work; Hydraulic Gantry (lifting system); Industrial - Type Tractors; Jet Engine Dryers (D8 or D9), Diesel Tractors; Locomotives (standard gage); Maintenance Operators (class A); Mixers, paving (single or double drum); Mucking Machines; Multiple Scrapers; Piledriving Machines (all types); Power Shovels, Prentice Loader; Quad 9 (double pusher); Rail Tamper (with automatic lifting and aligning device); Refrigerating Machines (freezer operation); Side Booms; Slip Form Pavers; Tower Dericks; Tree Shredders; Truck Mounted Concrete Pumps; Tug Boats; Tunnel Machines and /or Mining Machines; Wheel Excavators. Rough Terrain Fork-lift with Winch/Hoist; Compact Cranes, track rubber over 4,000 pound capacity, self-erecting cranes; stationary, track or truck (all configurations) Bucket trench machines (over 24 inches wide).

Class 2 - Asphalt Pavers; Automatic Subgrade Machines, self-propelled (CMI-type); Bobcat-type and /or skid steer loader with hoe attachment greater than 7000 lbs.; Boring Machine Operators (more than 48 inches); Bulldozers; Endloaders; Hydro Milling Machine; Kolman-type Loaders (production type-dirt); Lead Greasemen; Maintenance Operators, Class B (Portage and Summit Counties only); Pettibone-Rail Equipment; Power Graders; Power Scrapers; Push Cats; Lighting and Traffic Signal Installation Equipment includes all groups or classifications; Trench Machines (24inch wide and under); Vermeer Type Concrete saw. Material Transfer Equipment (Shuttle buggy) Asphalt; All rotomills,grinders and planers of all types. Horizontal Directional Drill (Over 50,000 ft.lbs.thrust and over)

Class 3 - A-Frames; Air Compressors, on tunnel work (low Pressure); Asphalt Plant Engineers; Bobcat-type and/or skid steer loader with or without attachments; Power Boilers (15 lbs pressure and

over); Highway Drills (all types); Rollers, asphalt; Pump Operators (installing or operating well Points); Pumps (4 inch and over discharge); Railroad Tie Inserter/Remover; Rotator (lime-soil Stabilizer), Switch & Tie Tampers (without lifting and aligning device); Locomotives (narrow gage); Mixers, concrete (more than one bag capacity); Mixers, one bag capacity (side loader); Utilities Operators, (small equipment); Welding Machines; Material hoist/elevators. Articulating/straight bed end dumps if assigned (minus \$4.00 per hour).

Class 4 -Ballast Re-locator; Backfillers, Batch Plants; Bar and Joint Installing Machines; Boring Machine Operators (48 inch or less); Bull Floats; Burlap and Curing Machines; Concrete Plants (capacity 4 yd and under); Conveyors (highway); Concrete Saws (multiple); Crushers; Deckhands; Farm type tractors, with attachments (highway), except masonry; Finishing Machines; Firemen, Floating Equipment (all types); Fork Lifts (highway); Form Trenchers; Hydro Hammers; Hydro Seeders; Pavement Breakers; Plant Mixers; Post Drivers; Post Hole Diggers (power auger); Power Brush Burners; Power Form Handling Equipment; Road Widening Trenchers; Rollers (brick, grade, macadam); Self-Propelled Power Spreaders; Self-Propelled Sub-Graders; Tractors, pulling sheepsfoot rollers or graders; Steam Firemen; Vibratory Compactors, with integral power.

Class 5 - Compressors (portable, Sewer, Heavy and Highway); Generators; Inboard-Outboard Motor Boat Launches; Masonry Fork Lifts; Oilers/Helpers; Power Driven Heaters; Power Scrubbers; Power Sweepers; Pumps (under 4 inch discharge); Signalmen; Drum Fireman (in Asphalt Plant); Oil Heaters (Asphalt Plant); Tire Repairmen; VAC/ALLS; Fueling and greasing (plus \$3.00), compact cranes: track or rubber under 4,000 pounds.

Class 6 - Master Mechanic

Name of Union: Painter Local 639

Change #: LCNO1-2015fbLoc639

Craft: Painter Effective Date: 06/10/2015 Last Posted: 06/10/2015

	BHR		Fring	ge Bene	fit Payı	ments		Irrevo Fui		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classifica	ation										
Painter Metal Finisher/Helpers											
Top Helper Class A	\$19.09	\$3.65	\$0.00	\$0.00	\$0.66	\$0.00	\$0.00	\$0.00	\$0.00	\$23.40	\$32.94
Top Helper Class B	\$19.09	\$3.65	\$0.65	\$0.00	\$1.03	\$0.00	\$0.37	\$0.00	\$0.00	\$24.79	\$34.33
Top Helper Class C	\$19.09	\$3.65	\$1.00	\$0.00	\$1.76	\$0.00	\$0.37	\$0.00	\$0.00	\$25.87	\$35.41
Helper Class A	\$14.69	\$3.65	\$0.00	\$0.00	\$0.51	\$0.00	\$0.00	\$0.00	\$0.00	\$18.85	\$26.19
Helper Class B	\$14.69	\$3.65	\$0.65	\$0.00	\$0.79	\$0.00	\$0.28	\$0.00	\$0.00	\$20.06	\$27.40
Helper Class C	\$14.69	\$3.65	\$1.00	\$0.00	\$1.64	\$0.00	\$0.28	\$0.00	\$0.00	\$21.26	\$28.60
New Hire 90 Days	\$11.00	\$3.65	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$14.65	\$20.15

Special Calculation Note: Other is Sick and Personal Time

Ratio:

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, CUYAHOGA, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GEAUGA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAKE, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE,

MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note:

Details:

Top Helper: Shall perform the responsibilities of a Helper and be responsible for the setup, break down, safety and quality of the company's product.

Helper: Shall be responsible for performing tasks in refinishing, compliance with safety procedures, setting up and breaking down job sites, scaffolding and swing stages and preparing surfaces for refinishing including but not limited to, masking and stripping and cleaning, oxidizing, polishing and scratch removal on various surfaces

.

Class A Workers: Less than 1 Year of Service.

Class B Workers: More than 1 and less than 8 Years of Service.

Class C Workers: More than 8 Years of Service.

Metal Polisher Scope of Work: Polishing, buffing, stripping, coloring, lacquering, spraying, cleaning and maintenance of ornamental and architectural metals, iron, bronze, nickel, aluminum and stainless steel and in mental specialty work, various stone finishes, stone specialty work and any other work pertaining to the finishing of metal, stones, woods, and any window washing/cleaning done in conjunction with this work, using chemicals, solvents, coatings and hand applied lacquer thinner, removing scratches from mirrow finished metals, burnishing of bronze, statuary finishes on exterior and interior surfaces and the use of all tools required to perform such work, including but not limited to polishes, spray equipment and scaffolding.

Swing State Rate: All work on scaffold 4 sections or higher, including any boom lifts and swing stage scaffolds including the rigging and derigging of hanging/suspended swing stage systems and rappelling/bolson chair work, ADD \$1.50 per hour.

Name of Union: Painter Local 639 Zone 2 Sign

Change #: LCN01-2016fbLoc639

Craft: Painter Effective Date: 08/03/2016 Last Posted: 08/03/2016

	BHR		Fring	ge Bene	fit Payı	nents		Irrevo Fu		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	ification										
Painter Sign Journeyman Tech/Team Leader Class A	\$21.25	\$1.33	\$0.14	\$0.00	\$0.00	\$0.00	\$0.57	\$0.00	\$0.00	\$23.29	\$33.92
Painter Sign Journeyman Tech/Team Leader Class B	\$21.25	\$1.33	\$0.14	\$0.00	\$0.41	\$0.00	\$0.57	\$0.00	\$0.00	\$23.70	\$34.32
Painter Sign Journeyman Tech/Team Leader Class C	\$21.25	\$1.33	\$0.14	\$0.00	\$0.82	\$0.00	\$0.57	\$0.00	\$0.00	\$24.11	\$34.74
Painter Sign Journeyman Tech/Team Leader Class D	\$21.25	\$1.33	\$0.14	\$0.00	\$1.23	\$0.00	\$0.57	\$0.00	\$0.00	\$24.52	\$35.14
Sign Journeyman Class A	\$20.98	\$1.33	\$0.14	\$0.00	\$0.00	\$0.00	\$0.56	\$0.00	\$0.00	\$23.01	\$33.50
Sign Journeyman Class B	\$20.98	\$1.33	\$0.14	\$0.00	\$0.40	\$0.00	\$0.56	\$0.00	\$0.00	\$23.41	\$33.90
Sign Journeyman Class C	\$20.98	\$1.33	\$0.14	\$0.00	\$0.81	\$0.00	\$0.56	\$0.00	\$0.00	\$23.82	\$34.31
Sign Journeyman Class D	\$20.98	\$1.33	\$0.14	\$0.00	\$1.21	\$0.00	\$0.56	\$0.00	\$0.00	\$24.22	\$34.71
Tech Sign Fabrication/ Erector Class A	\$15.90	\$1.33	\$0.14	\$0.00	\$0.00	\$0.00	\$0.43	\$0.00	\$0.00	\$17.80	\$25.75

Tech Sign Fabrication/ Erector Class B	\$15.90	\$1.33	\$0.14	\$0.00	\$0.31	\$0.00	\$0.43	\$0.00	\$0.00	\$18.11	\$26.06
Tech Sign Fabrication/ Erector Class C	\$15.90	\$1.33	\$0.14	\$0.00	\$0.61	\$0.00	\$0.43	\$0.00	\$0.00	\$18.41	\$26.36
Tech Sign Fabrication/ Erector Class D	\$15.90	\$1.33	\$0.14	\$0.00	\$0.92	\$0.00	\$0.43	\$0.00	\$0.00	\$18.72	\$26.67

Special Calculation Note: Other is for paid holidays.

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Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, AUGLAIZE, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GREENE, HAMILTON, HANCOCK, HARDIN, HENRY, HIGHLAND, HOLMES, HURON, JACKSON, KNOX, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MERCER, MIAMI, MONTGOMERY, MORROW, MUSKINGUM, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PREBLE, PUTNAM, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, WARREN, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note:

Details:

Class A: less that 1 year.

Class B: 1-3 years. Class C; 3-10 years.

Class D: More than 10 years.

Name of Union: Painter Locals 123 & 238

Change #: LCN01-2018fbLoc123-238

Craft: Drywall Finisher Effective Date: 05/01/2018 Last Posted: 04/25/2018

	Bl	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	ı										
Painter Drywall Finisher	all		\$5.08	\$4.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.40	\$46.71
Tapers and Finishers	\$24	4.61	\$5.08	\$4.40	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.40	\$46.71
Apprentice	Per	cent										
1st year	55.00	\$13.54	\$5.08	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$21.23	\$27.99
2nd year	65.00	\$16.00	\$5.08	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$23.69	\$31.68
2rd year	75.00	\$18.46	\$5.08	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26.15	\$35.38
4th year	80.00	\$19.69	\$5.08	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.38	\$37.22

Special Calculation Note:

Ratio:

1 Journeyman to 1 Apprentice per job

3 Journeyman to 1 Apprentice per company

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

Special Jurisdictional Note:

Details:

Industrial Work paid as commercial work above for each class which includes, Industrial Plants, repair garages, processing plants, storage tanks, warehouses, skeletons structures, bridges unless highest point of clearance is 60 feet or more whether new or old construction offices and office buildings in industrial sites are at industrial rates. Heavy & Highway Bridges-GuardRails- Light Poles. A hazardous steeplejack rate shall apply on radio towers, stacks, light towers, water towers, steeples, skeleton steel, and exterior industrial conveyors over 25 feet, where such items require steeplejack methods and the rate of pay shall be a \$1.00 per hour above the industrial rate. Steeplejack rate to apply to bridges where highest point of clearance is 60 feet.

Name of Union: Painter Locals 123 & 238 Commercial & Industrial

Change #: OCR01-2019fbLoc123

Craft: Painter Effective Date: 08/21/2019 Last Posted: 08/21/2019

	B	HR		Fring	ge Bene	fit Pay	nents		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Painter Brush Roll	\$24	4.61	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.55	\$47.85
Paper Hanger	\$24	4.61	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.55	\$47.85
Spray Painter	\$2:	\$25.11		\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.05	\$48.60
Sand Blaster Water Blaster	\$2:	\$25.36		\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.30	\$48.98
Elevated Tanks	\$2:	5.61	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.55	\$49.35
Apprentice	Per	cent										
1st year	55.00	\$13.54	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$21.84	\$28.60
2nd year	65.00	\$16.00	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24.30	\$32.29
3rd year	75.00	\$18.46	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$26.76	\$35.99
4th year	80.00	\$19.69	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.99	\$37.83

Special Calculation Note: Apprentices shall be paid the proper % of the classification above.

Ratio:

(1) Journeymen to (1) Apprentice per jobsite

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

Special Jurisdictional Note:

Details:

Industrial Work paid as commercial work above for each class which includes, Industrial Plants, repair garages, processing plants, storage tanks, warehouses, skeletons structures, bridges unless highest point of clearance is 60 feet or more whether new or old construction offices and office buildings in industrial sites are at industrial rates. Heavy & Highway Bridges-GuardRails- Light Poles. A hazardous steeplejack rate shall apply on radio towers, stacks, light towers, water towers, steeples, skeleton steel, and exterior industrial conveyors over 25 feet, where such items require steeplejack methods and the rate of pay shall be a \$1.00 per hour above the industrial rate. Steeplejack rate to apply to bridges where highest point of clearance is 60 feet.

Name of Union: Painter Local 123 & 238 Hvy Hwy

Change #: LCN01-2019fbLoc123

Craft: Painter Effective Date: 08/21/2019 Last Posted: 08/21/2019

	B	HR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classific	ation											
Painter Bridge Class 1	\$30	0.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.94	\$55.94
Bridge Painter, Rigger, Containment Builder, Spot Blaster Class 2	\$2:	5.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.94	\$48.44
Equipment Operator/Field Mechanic, Grit Reclamation, Paint Mixer, Traffic Control, Boat Person Class 3	\$23	5.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.94	\$48.44
Concrete Sealing, Concrete Blasting/Power Washing, Etc. Class 4	\$23	5.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.94	\$48.44
Quality Control/Quality Assurance, Traffic Safety, Competent Person Class 5	\$24	4.00	\$5.69	\$4.94	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.94	\$46.94
Apprentice	Per	cent										
1st year	55.00	\$16.50	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$24.80	\$33.05
2nd year	65.00	\$19.50	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.80	\$37.55
3rd year	75.00	\$22.50	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.80	\$42.05
4th year	80.00	\$24.00	\$5.69	\$2.30	\$0.31	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$32.30	\$44.30

Special Calculation Note: Apprentices shall be paid proper % of the classification above...

Ratio:

1 Journeyman to 1 Apprentice per job3 Journeyman to 1 Apprentice per company

Jurisdiction (* denotes special jurisdictional note):
BROWN, BUTLER, CLERMONT, CLINTON, HAMILTON, WARREN

Special Jurisdictional Note:

Details:

Industrial Work paid as commercial work above for each class which includes, Industrial Plants, repair garages, processing plants, storage tanks, warehouses, skeletons structures, bridges unless highest point of clearance is 60 feet or more whether new or old construction offices and office buildings in industrial sites are at industrial rates. Heavy & Highway Bridges-GuardRails- Light Poles. A hazardous steeplejack rate shall apply on radio towers, stacks, light towers, water towers, steeples, skeleton steel, and exterior industrial conveyors over 25 feet, where such items require steeplejack methods and the rate of pay shall be a \$1.00 per hour above the industrial rate. Steeplejack rate to apply to bridges where highest point of clearance is 60 feet.

Class 1 – Abrasive blasting of any kind.

Class 2 – Bridge painting, coating application of any kind. All steel surface preparation other than abrasive blasting. All necessary rigging and containment building. All remedial/ spot blasting. Class 3 – Tend to all equipment including but not limited to abrasive basting, power washing, spray painting, forklifts, hoists, trucks, etc. Load and unload trucks, handle materials, man safety boats, handle traffic control, clean up/ vacuum abrasive blast materials and related tasks. Class 4 – All aspects of concrete coating/ sealing including but not limited to preparation, containment, etc.

Class 5 – Verify and record that all work is completed according to job specifications. Assure that all health and safety standards are adhered to. Assure all traffic is safely handled.

Name of Union: Plasterer Local 132 (Cincinnati)

Change # : LCN01-2016fbLoc132

Craft: Plasterer Effective Date: 06/24/2016 Last Posted: 06/24/2016

	BHR			Fring	e Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	ì										•
Plasterer	\$2.	3.61	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$36.45	\$48.25
Apprentice	Per	cent										
1st 900 hours	55.00	\$12.99	\$5.59	\$0.00	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$19.68	\$26.17
2nd 900 hours	60.00	\$14.17	\$5.59	\$0.00	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$20.86	\$27.94
3rd 900 hours	65.00	\$15.35	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$28.19	\$35.86
4th 900 hours	70.00	\$16.53	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$29.37	\$37.63
5th 900 hours	80.00	\$18.89	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$31.73	\$41.17
6th 900 hours	85.00	\$20.07	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$32.91	\$42.94
7th 900 hours	90.00	\$21.25	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$34.09	\$44.71
8th 900 hours	95.00	\$22.43	\$5.59	\$6.15	\$0.50	\$0.00	\$0.60	\$0.00	\$0.00	\$0.00	\$35.27	\$46.48

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 Journeyman to 1 Apprentice

4 Journeyman to 2 Apprentice

7 Journeyman to 3 Apprentice

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN

Special Jurisdictional Note:

Details:

Apprentice and Shop Hand Pension are \$1.00 less than Journeyman.

Name of Union: Plumber Pipefitter Local 392

Change # : LCN01-2019-fbLoc392

Craft: Plumber/Pipefitter Effective Date: 06/05/2019 Last Posted: 06/05/2019

	Bl	HR		Fring	e Bene		Irrevo Fur		Total PWR	Overtime Rate		
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	l										
Plumber Pipefitter	\$32	2.81	\$7.40	\$12.39	\$0.50	\$0.00	\$0.00	\$0.98	\$0.00	\$0.00	\$54.08	\$70.48
Plumber Helper	\$21.33		\$7.30	\$6.59	\$0.50	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.72	\$46.38
Apprentice	Percent											
1st yr	46.50	\$15.26	\$7.20	\$0.40	\$0.50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$23.84	\$31.46
2nd yr	51.53	\$16.91	\$7.20	\$0.40	\$0.50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$25.49	\$33.94
3rd yr	56.53	\$18.55	\$7.20	\$6.59	\$0.50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$33.32	\$42.59
4th yr	61.53	\$20.19	\$7.20	\$6.59	\$0.50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$34.96	\$45.05
5th yr	76.53	\$25.11	\$7.20	\$12.39	\$0.50	\$0.00	\$0.00	\$0.48	\$0.00	\$0.00	\$45.68	\$58.23

Special Calculation Note: OTHER IS: SUPPLEMENTAL UNEMPLOYMENT BENEFITS.

Ratio:

- 1 Journeymen to 1 Apprentice
- 2 Journeymen to 4 Apprentices
- 3 Journeymen to 6 Apprentices

Jurisdiction (* denotes special jurisdictional note):

BROWN, BUTLER, CLERMONT, HAMILTON, WARREN

When more than twenty (20) Journeymen are employed additional apprentices may be acquired at a ratio of one (1) apprentice to four (4) journeymen.

Special Jurisdictional Note:

Details:

Helpers shall be permitted to work on ONLY, Exterior Sewers, Concrete, Vitrified Clay or PVC Pipe and Digging and Backfilling for Piping Work. The ratio shall not exceed 2 helpers to 1 Journeymen when performing the scope of work listed above

Name of Union: Roofer Local 42

Change #: LCNO2-2019fbLoc42

Craft: Roofer Effective Date: 09/19/2019 Last Posted: 09/19/2019

	Bl	HR		Fring	e Bene	fit Pay	ments		Irrevo Fun		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Roofer	\$28	8.25	\$7.87	\$7.55	\$0.32	\$0.00	\$0.50	\$0.06	\$0.00	\$0.00	\$44.55	\$58.67
Tradesmen	\$22	2.60	\$7.87	\$6.04	\$0.00	\$0.00	\$0.50	\$0.03	\$0.00	\$0.00	\$37.04	\$48.34
Apprentice	Percent											
1st period	60.00	\$16.95	\$7.87	\$4.53	\$0.03	\$0.00	\$0.50	\$0.00	\$0.00	\$0.00	\$29.88	\$38.35
2nd period	70.00	\$19.77	\$7.87	\$5.28	\$0.03	\$0.00	\$0.50	\$0.00	\$0.00	\$0.00	\$33.46	\$43.34
3rd period	80.00	\$22.60	\$7.87	\$6.04	\$0.03	\$0.00	\$0.50	\$0.00	\$0.00	\$0.00	\$37.04	\$48.34

Special Calculation Note: Other is Education and Safety.

Journeymen shall receive \$1.00 per hour above journeyman rate for work with pitch material.

Ratio:

Employer may employ 1 apprentice for every 2 journeymen in his employment.

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, BROWN, BUTLER, CLERMONT, HAMILTON, HIGHLAND, WARREN

Special Jurisdictional Note:

Details:

Any Tradesman Worker completing 2,000 hours in (2) years may move to Journeyman status by utilizing the Training Yard to improve their skills. Tradesman Workers will be tested at these yards to determine their competency for Journeyman status. Tradesman Workers must schedule and successfully complete the industry test battery in order to gain journeyman status.

Name of Union: Sheet Metal Local 24 (Dayton)

Change #: LCR02-2019fbLoc24(Day)

Craft: Sheet Metal Worker Effective Date: 06/19/2019 Last Posted: 06/19/2019

	BHR			Fring	ge Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classi	ification											
Sheet Metal Worker	\$2	7.72	\$8.52	\$14.46	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$51.55	\$65.41
Apprentice	Per	cent										
Apprentice												
5th Year B	80.00	\$22.18	\$8.26	\$11.56	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$42.85	\$53.93
5th Year A	75.00	\$20.79	\$8.20	\$10.85	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.69	\$51.09
4th Year B	70.00	\$19.40	\$8.13	\$10.13	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.51	\$48.22
4th Year A	65.00	\$18.02	\$8.07	\$9.40	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.34	\$45.35
3rd year B	60.00	\$16.63	\$8.01	\$8.68	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$34.17	\$42.49
3rd Year A	55.00	\$15.25	\$7.94	\$7.95	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$31.99	\$39.61
2 Year B	53.78	\$14.91	\$7.90	\$7.02	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$30.68	\$38.13
2 Year A	52.69	\$14.61	\$7.88	\$6.49	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$29.83	\$37.13
Probationary 1 Year	51.13	\$14.17	\$7.85	\$5.87	\$0.85	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$28.74	\$35.83

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 Journeyman to 1 Apprentice then,

1 Apprentice for every 2 Journeymen thereafter

Jurisdiction (* denotes special jurisdictional note):

ALLEN, AUGLAIZE, BUTLER, CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, HARDIN, LOGAN, MERCER, MIAMI, MONTGOMERY, PREBLE, SHELBY, VAN WERT, WARREN, WYANDOT

Special Jurisdictional Note:

Details:

Name of Union: Sprinkler Fitter Local 669

Change # : LCN01-2019fbLoc669

Craft: Sprinkler Fitter Effective Date: 04/03/2019 Last Posted: 04/03/2019

	Bl	HR		Fring	e Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification	ı										
Sprinkler Fitter	\$3	7.78	\$10.02	\$6.60	\$0.52	\$0.00	\$6.41	\$0.00	\$0.00	\$0.00	\$61.33	\$80.22
Apprentice Indentured after April 1, 2013	Percent											
CILASS 1	46.53	\$17.58	\$7.75	\$0.00	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$25.85	\$34.64
CLASS 2	51.73	\$19.54	\$7.75	\$0.00	\$0.52	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$27.81	\$37.59
CLASS 3	56.23	\$21.24	\$10.02	\$6.60	\$0.52	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$39.28	\$49.91
CLASS 4	61.38	\$23.19	\$10.02	\$6.60	\$0.52	\$0.00	\$0.90	\$0.00	\$0.00	\$0.00	\$41.23	\$52.82
CLASS 5	66.58	\$25.15	\$10.02	\$6.60	\$0.52	\$0.00	\$1.15	\$0.00	\$0.00	\$0.00	\$43.44	\$56.02
CLASS 6	71.73	\$27.10	\$10.02	\$6.60	\$0.52	\$0.00	\$1.15	\$0.00	\$0.00	\$0.00	\$45.39	\$58.94
CLASS 7	76.90	\$29.05	\$10.02	\$6.60	\$0.52	\$0.00	\$1.15	\$0.00	\$0.00	\$0.00	\$47.34	\$61.87
CLASS 8	82.08	\$31.01	\$10.02	\$6.60	\$0.52	\$0.00	\$1.15	\$0.00	\$0.00	\$0.00	\$49.30	\$64.80
CLASS 9	87.25	\$32.96	\$10.02	\$6.60	\$0.52	\$0.00	\$1.15	\$0.00	\$0.00	\$0.00	\$51.25	\$67.73
CLASS 10	92.40	\$34.91	\$10.02	\$6.60	\$0.52	\$0.00	\$1.15	\$0.00	\$0.00	\$0.00	\$53.20	\$70.65

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

1 Journeyman to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE,

LICKING, LOGAN, LUCAS, MADISON,
MAHONING, MARION, MEDINA, MEIGS,
MERCER, MIAMI, MONROE,
MONTGOMERY, MORGAN, MORROW,
MUSKINGUM, NOBLE, OTTAWA,
PAULDING, PERRY, PICKAWAY, PIKE,
PORTAGE, PREBLE, PUTNAM, RICHLAND,
ROSS, SANDUSKY, SCIOTO, SENECA,
SHELBY, STARK, SUMMIT, TRUMBULL,
TUSCARAWAS, UNION, VAN WERT,
VINTON, WARREN, WASHINGTON, WAYNE,
WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note:

Details:

Sprinkler Fitter work shall consist of the installation, dismantling, maintenance, repairs, adjustments, and corrections of all fire protection and fire control systems including the unloading, handling by hand, power equipment and installation of all piping or tubing, appurtenances and equipment pertaining thereto, including both overhead and underground water mains, fire hydrants and hydrant mains, standpipes and hose connections to sprinkler systems used in connection with sprinkler and alarm systems. Also all tanks and pumps connected thereto, also included shall be CO-2 and Cardox Systems, Dry Chemical Systems, Foam Systems and all other fire protection systems.

Name of Union: Truck Driver Bldg & HevHwy Class 1 Locals 20,40,92,92b,100,175,284,438,377,637,908,957

Change #: LCON1-2017fbBldgHevHwy

Craft: Truck Driver Effective Date: 07/05/2017 Last Posted: 07/05/2017

	BI	łR		Fring	e Bene	fit Pay	ments		Irrevo Fui		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Class	sification											
Truck Driver CLASS 1 4 wheel service, dump, and batch trucks, Oil Distributor - Asphalt Distributor Tandems	\$26	5.49	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.99	\$54.24
Apprentice	Per	cent										
First 6 months	80.00	\$21.19	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$35.69	\$46.29
7-12 months	85.00	\$22.52	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.02	\$48.27
13-18 months	90.00	\$23.84	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.34	\$50.26
19-24 months	95.00	\$25.17	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$39.67	\$52.25
25-30 months	100.00	\$26.49	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.99	\$54.24

Special Calculation Note : No special calculations for this skilled craft wage rate are required at this time.

Ratio:

3 Journeymen to 1 Apprentice per company/project

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE,

DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note:

Details:

** Asphalt - Oil spray bar man when operating from cab shall receive \$0.20 cents per hour above their Basic Hourly Rate.

Name of Union: Truck Driver Bldg & HevHwy Class 2 Locals 20,40,92,92b,100,175,284,438,377,637,908,957

Change #: CN1-2017-fbBldgHevHwy

Craft: Truck Driver Effective Date: 07/05/2017 Last Posted: 07/05/2017

	BI	IR		Fring	e Bene	fit Pay	ments		Irrevo Fur		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classifi	cation											
Truck Driver CLASS 2 Tractor Trailer-Semi Tractor Trucks-Pole Trailers- Ready Mix Trucks-Fuel Trucks- Asphalt-Oil Spray bar men- 5 Axle & Over -Belly Dumps-End Dumps- Articulated Dump Trucks- Low boys- Heavy duty Equipment (irrespective of load carried) when used exclusively for transportation- Truck Mechanics (when needed)	\$26	.91	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.41	\$54.87
Apprentice	Per	cent										
First 6 months	80.00	\$21.53	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$36.03	\$46.79
7-12 months	85.00	\$22.87	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$37.37	\$48.81
13-18 months	90.00	\$24.22	\$7.00	\$7.30	\$0.20	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$38.72	\$50.83

19-24 months	95.00	\$25.56	\$7.00	\$7.30	\$0.20 \$0	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$40.06	\$52.85
25-30 months	100.00	\$26.91	\$7.00	\$7.30	\$0.20 \$0	0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$41.41	\$54.87

Special Calculation Note: No special calculations for this skilled craft wage rate are required at this time.

Ratio:

3 Journeymen to 1 Apprentice per company/project

Jurisdiction (* denotes special jurisdictional note):

ADAMS, ALLEN, ASHLAND, ASHTABULA, ATHENS, AUGLAIZE, BELMONT, BROWN, BUTLER, CARROLL, CHAMPAIGN, CLARK, CLERMONT, CLINTON, COLUMBIANA, COSHOCTON, CRAWFORD, DARKE, DEFIANCE, DELAWARE, ERIE, FAIRFIELD, FAYETTE, FRANKLIN, FULTON, GALLIA, GREENE, GUERNSEY, HAMILTON, HANCOCK, HARDIN, HARRISON, HENRY, HIGHLAND, HOCKING, HOLMES, HURON, JACKSON, JEFFERSON, KNOX, LAWRENCE, LICKING, LOGAN, LORAIN, LUCAS, MADISON, MAHONING, MARION, MEDINA, MEIGS, MERCER, MIAMI, MONROE, MONTGOMERY, MORGAN, MORROW, MUSKINGUM, NOBLE, OTTAWA, PAULDING, PERRY, PICKAWAY, PIKE, PORTAGE, PREBLE, PUTNAM, RICHLAND, ROSS, SANDUSKY, SCIOTO, SENECA, SHELBY, STARK, SUMMIT, TRUMBULL, TUSCARAWAS, UNION, VAN WERT, VINTON, WARREN, WASHINGTON, WAYNE, WILLIAMS, WOOD, WYANDOT

Special Jurisdictional Note:

Details:

** Asphalt - Oil spray bar man when operating from cab shall receive \$0.20 cents per hour above their Basic Hourly Rate.

SECTION 00700 – STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

PART 1 GENERAL

1.01 GENERAL CONDITIONS

The Warren County Water and Sewer Department has adopted the Standard General Conditions of the Construction Contract prepared by the Engineers Joint Contract Documents Committee and issued and published jointly by the American Consulting Engineers Council, the National Society of Professional Engineers, and the American Society of Civil Engineers. This document, contained herein, shall be made part of the Contract and shall be used during the performance of the work.

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This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the Controlling Law.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly By







PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE a practice division of the NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

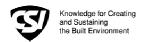
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American Council of Engineering Companies 1015 15th Street, N.W., Washington, DC 20005

American Society of Civil Engineers 1801 Alexander Bell Drive, Reston, VA 20191-4400

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor Nos. C-520 or C-525 (2002 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the EJCDC Construction Documents, General and Instructions (No. C-001) (2002 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (No. C-800) (2002 Edition).

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GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS AND TERMINOLOGY

1.01 Defined Terms

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
- 1. Addenda--Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
- 2. *Agreement*--The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
- 3. Application for Payment--The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 4. Asbestos--Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
- 5. *Bid*--The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
- 6. *Bidder*--The individual or entity who submits a Bid directly to Owner.
- 7. Bidding Documents--The Bidding Requirements and the proposed Contract Documents (including all Addenda).
- 8. Bidding Requirements--The Advertisement or Invitation to Bid, Instructions to Bidders, bid security of acceptable form, if any, and the Bid Form with any supplements.

- 9. Change Order--A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
- 10. *Claim*--A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
- 11. Contract--The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
- 12. Contract Documents-- Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor's submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
- 13. Contract Price--The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of Paragraph 11.03 in the case of Unit Price Work).
- 14. *Contract Times*--The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any, (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
- 15. *Contractor*--The individual or entity with whom Owner has entered into the Agreement.
- 16. Cost of the Work--See Paragraph 11.01.A for definition.
- 17. *Drawings*--That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
- 18. Effective Date of the Agreement--The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 19. *Engineer*--The individual or entity named as such in the Agreement.
- 20. Field Order--A written order issued by Engineer which requires minor changes in the Work but which does

not involve a change in the Contract Price or the Contract Times.

- 21. *General Requirements*--Sections of Division 1 of the Specifications. The General Requirements pertain to all sections of the Specifications.
- 22. Hazardous Environmental Condition--The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto in connection with the Work.
- 23. *Hazardous Waste*--The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
- 24. Laws and Regulations; Laws or Regulations-Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
- 25. *Liens*--Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
- 26. *Milestone--*A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 27. Notice of Award--The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
- 28. *Notice to Proceed--*A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
- 29. *Owner*--The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
 - 30. PCBs--Polychlorinated biphenyls.
- 31. *Petroleum*--Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
- 32. Progress Schedule--A schedule, prepared and maintained by Contractor, describing the sequence and

- duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
- 33. *Project*--The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
- 34. *Project Manual*--The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
- 35. *Radioactive Material*--Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 36. *Related Entity* -- An officer, director, partner, employee, agent, consultant, or subcontractor.
- 37. Resident Project Representative--The authorized representative of Engineer who may be assigned to the Site or any part thereof.
- 38. Samples--Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 39. Schedule of Submittals--A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
- 40. Schedule of Values--A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.
- 41. Shop Drawings--All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
- 42. Site--Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.

- 43. Specifications--That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
- 44. Subcontractor--An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
- 45. Substantial Completion--The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized for the purposes for which it is intended. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 46. Successful Bidder--The Bidder submitting a responsive Bid to whom Owner makes an award.
- 47. *Supplementary Conditions*--That part of the Contract Documents which amends or supplements these General Conditions.
- 48. Supplier.-A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.
- 49. *Underground Facilities*--All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
- 50. *Unit Price Work*--Work to be paid for on the basis of unit prices.
- 51. Work--The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
- 52. Work Change Directive--A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by

Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

1.02 Terminology

A. The following words or terms are not defined but, when used in the Bidding Requirements or Contract Documents, have the following meaning.

B. Intent of Certain Terms or Adjectives

1. The Contract Documents include the terms "as allowed," "as approved," "as ordered", "as directed" or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives "reasonable," "suitable," "acceptable," "proper," "satisfactory," or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action or determination will be solely to evaluate, in general, the Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. Day

1. The word "day" means a calendar day of 24 hours measured from midnight to the next midnight.

D. Defective

- 1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents, or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or

approval referred to in the Contract Documents, or

c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

E. Furnish, Install, Perform, Provide

- 1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.
- 2. The word "install," when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
- 3. The words "perform" or "provide," when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
- 4. When "furnish," "install," "perform," or "provide" is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, "provide" is implied.
- F. Unless stated otherwise in the Contract Documents, words or phrases which have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 - PRELIMINARY MATTERS

2.01 Delivery of Bonds and Evidence of Insurance

- A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. Evidence of Insurance: Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which

Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

2.02 Copies of Documents

A. Owner shall furnish to Contractor up to ten printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 Commencement of Contract Times; Notice to Proceed

A. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 Starting the Work

A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 Before Starting Construction

A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:

- 1. a preliminary Progress Schedule; indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
- 2. a preliminary Schedule of Submittals; and
- 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 Preconstruction Conference

A. Before any Work at the Site is started, a conference attended by Owner, Contractor, Engineer, and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in Paragraph 2.05.A, procedures for handling Shop Drawings and other

submittals, processing Applications for Payment, and maintaining required records.

2.07 Initial Acceptance of Schedules

A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.

- 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
- 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
- 3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 Intent

- A. The Contract Documents are complementary; what is required by one is as binding as if required by all.
- B. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be provided whether or not specifically called for at no additional cost to Owner.
- C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 Reference Standards

A. Standards, Specifications, Codes, Laws, and Regulations

- 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the standard, specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.
- 2. No provision of any such standard, specification, manual or code, or any instruction of a Supplier shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, or Engineer, or any of, their Related Entities, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 Reporting and Resolving Discrepancies

A. Reporting Discrepancies

- 1. Contractor's Review of Contract Documents Before Starting Work: Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.
- 2. Contractor's Review of Contract Documents During Performance of Work: If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any Law or Regulation applicable to the performance of the Work or of any standard, specification, manual or code, or of any instruction of any Supplier, Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.

3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor knew or reasonably should have known thereof.

B. Resolving Discrepancies

- 1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:
 - a. the provisions of any standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents); or
 - b. the provisions of any Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

3.04 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented and minor variations and deviations in the Work may be authorized, by one or more of the following ways:
 - 1. A Field Order;
 - 2. Engineer's approval of a Shop Drawing or Sample; (Subject to the provisions of Paragraph 6.17.D.3); or
 - 3. Engineer's written interpretation or clarification.

3.05 Reuse of Documents

- A. Contractor and any Subcontractor or Supplier or other individual or entity performing or furnishing all of the Work under a direct or indirect contract with Contractor, shall not:
 - 1. have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's consultants, including electronic media editions; or

- 2. reuse any of such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaption by Engineer.
- B. The prohibition of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 Electronic Data

- A. Copies of data furnished by Owner or Engineer to Contractor or Contractor to Owner or Engineer that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

ARTICLE 4 - AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS

4.01 Availability of Lands

A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor

may make a Claim therefor as provided in Paragraph 10.05.

- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.
- 4.02 Subsurface and Physical Conditions

A. *Reports and Drawings:* The Supplementary Conditions identify:

- 1. those reports of explorations and tests of subsurface conditions at or contiguous to the Site that Engineer has used in preparing the Contract Documents; and
- 2. those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site (except Underground Facilities) that Engineer has used in preparing the Contract Documents.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

- 4.03 Differing Subsurface or Physical Conditions
- A. *Notice:* If Contractor believes that any subsurface or physical condition at or contiguous to the Site that is uncovered or revealed either:
 - 1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
 - 2. is of such a nature as to require a change in the Contract Documents; or
 - 3. differs materially from that shown or indicated in the Contract Documents; or
 - 4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents;

then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

- B. *Engineer's Review*: After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.
- C. Possible Price and Times Adjustments
 - 1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
 - b. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract Price will be subject to the provisions of Paragraphs 9.07 and 11.03.
 - 2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:

- a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
- b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or
- c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
- 3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, Owner and Engineer, and any of their Related Entities shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

- A. Shown or Indicated: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:
 - 1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and
 - 2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all such information and data,
 - b. locating all Underground Facilities shown or indicated in the Contract Documents,
 - c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction, and

d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. Not Shown or Indicated

- 1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents. Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
- 2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such consequences. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 Reference Points

A. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points or property monuments by professionally qualified personnel.

- A. *Reports and Drawings:* Reference is made to the Supplementary Conditions for the identification of those reports and drawings relating to a Hazardous Environmental Condition identified at the Site, if any, that have been utilized by the Engineer in the preparation of the Contract Documents.
- B. Limited Reliance by Contractor on Technical Data Authorized: Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their Related Entities with respect to:
 - 1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto; or
 - 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.
- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any.
- E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered to Contractor written notice:

- (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.
- F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.
- G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants, and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 - BONDS AND INSURANCE

5.01 Performance, Payment, and Other Bonds

A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other bonds as are required by the Contract Documents.

B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent must be accompanied by a certified copy of the agent's authority to act.

C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 Licensed Sureties and Insurers

A. All bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 Certificates of Insurance

A. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence

of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain.

B. Owner shall deliver to Contractor, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.

5.04 *Contractor's Liability Insurance*

- A. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
 - 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
 - 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
 - 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
 - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
 - b. by any other person for any other reason;
 - 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
 - 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by this Paragraph 5.04 shall:
 - 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, include as additional insured (subject to any customary exclu-

sion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;

- 2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
- 3. include completed operations insurance;
- 4. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20:
- 5. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
- 6. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
- 7. with respect to completed operations insurance, and any insurance coverage written on a claims-made basis, remain in effect for at least two years after final payment.
 - a. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

5.05 Owner's Liability Insurance

A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents.

5.06 Property Insurance

- A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
 - 1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured:
 - 2. be written on a Builder's Risk "all-risk" or open peril or special causes of loss policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, false work, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage, (other than caused by flood) and such other perils or causes of loss as may be specifically required by the Supplementary Conditions;
 - 3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 - 4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
 - 5. allow for partial utilization of the Work by Owner;
 - 6. include testing and startup; and
 - 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other additional insured to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such boiler and machinery insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and

any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or additional insured.

- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
- E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under Paragraph 5.06, Owner shall, if possible, include such insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

5.07 Waiver of Rights

A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or additional insureds thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and,

in addition, waive all such rights against Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insured or additional insured (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.

- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them for:
 - 1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 - 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them.
- 5.08 Receipt and Application of Insurance Proceeds
- A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.
- B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make

settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

5.09 Acceptance of Bonds and Insurance; Option to Replace

A. If either Owner or Contractor has any objection to the coverage afforded by or other provisions of the bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent bonds or insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

5.10 Partial Utilization, Acknowledgment of Property Insurer

A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.01 Supervision and Superintendence

A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques,

sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances. The superintendent will be Contractor's representative at the Site and shall have authority to act on behalf of Contractor. All communications given to or received from the superintendent shall be binding on Contractor.

6.02 Labor; Working Hours

A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.

B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 Services, Materials, and Equipment

A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.

- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 Substitutes and "Or-Equals"

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.
 - 1. "Or-Equal" Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole,

- 3) it has a proven record of performance and availability of responsive service; and
- b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times, and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.

2. Substitute Items

- a. If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
- b. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
- c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances.
- d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - 1) shall certify that the proposed substitute item will:
 - a) perform adequately the functions and achieve the results called for by the general design,
 - b) be similar in substance to that specified, and
 - c) be suited to the same use as that specified;

2) will state:

a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor's achievement of Substantial Completion on time;

- b) whether or not use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item; and
- c) whether or not incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
- 3) will identify:
 - a) all variations of the proposed substitute item from that specified, and
 - b) available engineering, sales, maintenance, repair, and replacement services:
- 4) and shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change,
- B. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.
- C. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No "or equal" or substitute will be ordered, installed or utilized until Engineer's review is complete, which will be evidenced by either a Change Order for a substitute or an approved Shop Drawing for an "or equal." Engineer will advise Contractor in writing of any negative determination.
- D. *Special Guarantee:* Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.
- E. Engineer's Cost Reimbursement: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B Whether or not Engineer approves a substitute

- item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- F. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute or "or-equal" at Contractor's expense.
- 6.06 Concerning Subcontractors, Suppliers, and Others
- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.
- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued . No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.
- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity, nor

- 2. shall anything in the Contract Documents create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, and Engineer,, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or additional insureds (and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

6.07 Patent Fees and Royalties

A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or

royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

B. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product, or device not specified in the Contract Documents.

6.08 Permits

A. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 Laws and Regulations

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on

entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 Taxes

A. Contractor shall pay all sales, consumer, use, and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

6.11 *Use of Site and Other Areas*

A. Limitation on Use of Site and Other Areas

- 1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
- 2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
- 3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.
- B. Removal of Debris During Performance of the Work: During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.
- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the

Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. Loading Structures: Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.12 Record Documents

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written interpretations and clarifications in good order and annotated to show changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples, and Shop Drawings will be delivered to Engineer for Owner.

6.13 Safety and Protection

- A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
 - 1. all persons on the Site or who may be affected by the Work:
 - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or

indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or , or anyone employed by any of them, or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier, or other individual or entity directly or indirectly employed by any of them).

D. Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 Safety Representative

A. Contractor shall designate a qualified and experienced safety representative at the Site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

6.15 *Hazard Communication Programs*

A. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the Site in accordance with Laws or Regulations.

6.16 Emergencies

A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor is obligated to act to prevent threatened damage, injury, or loss. Contractor shall give Engineer prompt written notice if Contractor believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby or are required as a result thereof. If Engineer determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Work Change Directive or Change Order will be issued.

6.17 *Shop Drawings and Samples*

A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the acceptable Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. Shop Drawings

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.
- 2. Samples: Contractor shall also submit Samples to Engineer for review and approval in accordance with the acceptable schedule of Shop Drawings and Sample submittals.
 - a. Submit number of Samples specified in the Specifications.
 - b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.
- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. Submittal Procedures

- 1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:
 - a. all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto:
 - b. the suitability of all materials with respect to intended use, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work;
 - c. all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto; and
 - d. shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the

requirements of the Work and the Contract Documents.

- 2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.
- 3. With each submittal, Contractor shall give Engineer specific written notice of any variations, that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawing's or Sample Submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. Engineer's Review

- 1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents.
- 2. Engineer's review and approval will not extend to means, methods, techniques, sequences, or procedures of construction (except where a particular means, method, technique, sequence, or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.
- 3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. Resubmittal Procedures

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review and approval. Contractor shall direct specific attention in writing to

revisions other than the corrections called for by Engineer on previous submittals.

6.18 *Continuing the Work*

A. Contractor shall carry on the Work and adhere to the Progress Schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by Paragraph 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its Related Entities shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 - 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 - 2. normal wear and tear under normal usage.
- C. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:
 - 1. observations by Engineer;
 - 2. recommendation by Engineer or payment by Owner of any progress or final payment;
 - 3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
 - 4. use or occupancy of the Work or any part thereof by Owner;
 - 5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
 - 6. any inspection, test, or approval by others; or
 - 7. any correction of defective Work by Owner.

A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, partners, employees, agents, consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to the performance of the Work, provided that any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable.

- B. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors, partners, or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, partners, employees, agents, consultants and subcontractors arising out of:
 - 1. the preparation or approval of, or the failure to prepare or approve, maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or
 - 2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.
- 6.21 Delegation of Professional Design Services

A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures.

Contractor shall not be required to provide professional services in violation of applicable law.

- B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.
- D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 - OTHER WORK AT THE SITE

7.01 Related Work at Site

- A. Owner may perform other work related to the Project at the Site with Owner's employees, or via other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
 - 1. written notice thereof will be given to Contractor prior to starting any such other work; and
 - 2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.

- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and shall properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.
- C. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 Coordination

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
 - 1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
 - 2. the specific matters to be covered by such authority and responsibility will be itemized; and
 - 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 Legal Relationships

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and

disruption costs incurred by Contractor as a result of the other contractor's actions or inactions.

C. Contractor shall be liable to Owner and any other contractor for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's action or inactions.

ARTICLE 8 - OWNER'S RESPONSIBILITIES

8.01 Communications to Contractor

A. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.02 Replacement of Engineer

A. In case of termination of the employment of Engineer, Owner shall appoint an engineer to whom Contractor makes no reasonable objection, whose status under the Contract Documents shall be that of the former Engineer.

8.03 Furnish Data

A. Owner shall promptly furnish the data required of Owner under the Contract Documents.

8.04 Pay When Due

A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.

8.05 Lands and Easements; Reports and Tests

A. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the Site that have been utilized by Engineer in preparing the Contract Documents.

8.06 Insurance

A. Owner's responsibilities, if any, in respect to purchasing and maintaining liability and property insurance are set forth in Article 5.

8.07 Change Orders

A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.

A. Owner's responsibility in respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.

8.09 Limitations on Owner's Responsibilities

A. The Owner shall not supervise, direct, or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

8.10 Undisclosed Hazardous Environmental Condition

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.

8.11 Evidence of Financial Arrangements

A. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 - ENGINEER'S STATUS DURING CONSTRUCTION

9.01 Owner's Representative

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and will not be changed without written consent of Owner and Engineer.

9.02 Visits to Site

A. Engineer will make visits to the Site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site to

check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.

B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's visits or observations of Contractor's Work Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work.

9.03 Project Representative

A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 9.09. If Owner designates another representative or agent to represent Owner at the Site who is not Engineer's consultant, agent or employee, the responsibilities and authority and limitations thereon of such other individual or entity will be as provided in the Supplementary Conditions.

9.04 Authorized Variations in Work

A. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor, who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 Rejecting Defective Work

A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the

Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 Shop Drawings, Change Orders and Payments

- A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.
- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.
- C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.
- D. In connection with Engineer's authority as to Applications for Payment, see Article 14.
- 9.07 Determinations for Unit Price Work
- A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.
- 9.08 Decisions on Requirements of Contract Documents and Acceptability of Work
- A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question
- B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believe that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

- C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.
- D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.
- 9.09 Limitations on Engineer's Authority and Responsibilities
- A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.
- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with the Contract Documents.
- E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to, the Resident Project Representative, if any, and assistants, if any.

10.01 Authorized Changes in the Work

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).
- B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 Unauthorized Changes in the Work

A. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any work performed that is not required by the Contract Documents as amended, modified, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.B.

10.03 Execution of Change Orders

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:
 - 1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;
 - 2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
 - 3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

10.04 *Notification to Surety*

A. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any bond to be given to a surety, the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

- A. Engineer's Decision Required: All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.
- B. *Notice:* Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within 60 days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Time shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within 30 days after receipt of the claimant's last submittal (unless Engineer allows additional time).
- C. *Engineer's Action*: Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
 - 1. deny the Claim in whole or in part,
 - 2. approve the Claim, or
 - 3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.

- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.
- F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in accordance with this Paragraph 10.05.

ARTICLE 11 - COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

- A. Costs Included: The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items, and shall not include any of the costs itemized in Paragraph 11.01.B.
 - 1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include. without limitation, superintendents, foremen, and other personnel employed full time at the Site. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits, which shall include social security contributions, unemployment, excise, and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
 - 2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All

- cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
- 3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.
- 4. Costs of special consultants (including but not limited to Engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
- 5. Supplemental costs including the following:
 - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
 - c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, imposed by Laws and Regulations.
 - e. Deposits lost for causes other than negligence of Contractor, any Subcontractor, or anyone

directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

- f. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
- g. The cost of utilities, fuel, and sanitary facilities at the Site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, expresses, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.
- B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:
 - 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators. attornevs. auditors, accountants. purchasing and contracting agents, expediters, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.
 - 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.

- 3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.
- 4. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of defective Work, disposal of materials or equipment wrongly supplied, and making good any damage to property.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A and 11.01.B.
- C. Contractor's Fee: When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.
- D. Documentation: Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. Cash Allowances

- 1. Contractor agrees that:
 - a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
 - b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. Contingency Allowance

- 1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 Unit Price Work

- A. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer subject to the provisions of Paragraph 9.07.
- C. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.
- D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
 - 1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and
 - 2. there is no corresponding adjustment with respect any other item of Work; and
 - 3. Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 - CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

12.01 Change of Contract Price

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
 - 1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 11.03); or
 - 2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
 - 3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:
 - 1. a mutually acceptable fixed fee; or
 - 2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
 - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
 - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraph 12.01.C.2.a is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier

Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;

- d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
- e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
- f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 Change of Contract Times

A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 Delays

- A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.
- B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times , or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.

- C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.
- D. Owner, Engineer and the Related Entities of each of them shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of Engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.
- E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 - TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 Notice of Defects

A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. All defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 Access to Work

A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, inspecting, and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's Site safety procedures and programs so that they may comply therewith as applicable.

13.03 Tests and Inspections

- A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections,

tests, or approvals required by the Contract Documents except:

- 1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
- 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in said Paragraph 13.04.C; and
- 3. as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.
- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

13.04 *Uncovering Work*

- A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.
- B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

- C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.
- D. If, the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 Correction or Removal of Defective Work

- A. Promptly after receipt of notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 Correction Period

A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

- 1. repair such defective land or areas; or
- 2. correct such defective Work; or
- 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
- 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitation or repose.
- 13.08 Acceptance of Defective Work

A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 Owner May Correct Defective Work

A. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days written notice to Contractor, correct or remedy any such deficiency.

- B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or remedial action, Owner may exclude Contractor from all or part of the Site, take possession of all or part of the Work and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the Site, and incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representatives, agents and employees, Owner's other contractors, and Engineer and Engineer's consultants access to the Site to enable Owner to exercise the rights and remedies under this Paragraph.
- C. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 will be charged against Contractor, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to

an appropriate decrease in the Contract Price. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. Such claims, costs, losses and damages will include but not be limited to all costs of repair, or replacement of work of others destroyed or damaged by correction, removal, or replacement of Contractor's defective Work.

D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 - PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 Schedule of Values

A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

14.02 Progress Payments

A. Applications for Payments

- 1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
- 2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

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

B. Review of Applications

- 1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
- 2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations on the Site of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
 - a. the Work has progressed to the point indicated:
 - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and to any other qualifications stated in the recommendation); and
 - c. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.
- 3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
 - a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
 - b. that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.
- 4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment,

including final payment, will impose responsibility on Engineer:

- a. to supervise, direct, or control the Work, or
- b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
- c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
- d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
- e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
- 5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:
 - a. the Work is defective, or completed Work has been damaged, requiring correction or replacement:
 - b. the Contract Price has been reduced by Change Orders;
 - c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
 - d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment

- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
 - a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
 - b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
 - c. there are other items entitling Owner to a set-off against the amount recommended; or
 - d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.
- 3. If it is subsequently determined that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1.

14.03 Contractor's Warranty of Title

A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

14.04 Substantial Completion

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.

- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within 14 days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said 14 days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.
- E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to complete or correct items on the tentative list.

14.05 Partial Utilization

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions.
 - 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue

a certificate of Substantial Completion for that part of the Work.

- 2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
- 3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
- 4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 Final Inspection

A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

14.07 Final Payment

A. Application for Payment

- 1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
- 2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents, including but not limited to the

evidence of insurance required by Paragraph 5.04.B.7:

- b. consent of the surety, if any, to final payment;
- c. a list of all Claims against Owner that Contractor believes are unsettled; and
- d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.
- 3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

B. Engineer's Review of Application and Acceptance

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

C. Payment Becomes Due

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and, will be paid by Owner to Contractor.

14.08 Final Completion Delayed

A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

14.09 Waiver of Claims

A. The making and acceptance of final payment will constitute:

- 1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
- 2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 - SUSPENSION OF WORK AND TERMINATION

15.01 Owner May Suspend Work

A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

- A. The occurrence of any one or more of the following events will justify termination for cause:
 - 1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
 - 2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
 - 3. Contractor's disregard of the authority of Engineer; or
 - 4. Contractor's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:
 - 1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion),
 - 2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere, and
 - 3. complete the Work as Owner may deem expedient.
- C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph Owner shall not be required to obtain the lowest price for the Work performed.

- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B, and 15.02.C.
- 15.03 Owner May Terminate For Convenience
- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work:
 - 2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
 - 3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
 - 4. reasonable expenses directly attributable to termination.
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.
- 15.04 Contractor May Stop Work or Terminate
- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment

within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 - DISPUTE RESOLUTION

16.01 Methods and Procedures

- A. Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement. The request for mediation shall be submitted in writing to the American Arbitration Association and the other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.
- B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.
- C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:
 - 1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions, or
 - 2. agrees with the other party to submit the Claim to another dispute resolution process, or

3. gives written notice to the other party of their intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 - MISCELLANEOUS

17.01 Giving Notice

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 - 1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or
 - 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 Computation of Times

A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

17.03 Cumulative Remedies

A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

17.04 Survival of Obligations

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

17.05 Controlling Law

A. This Contract is to be governed by the law of the state in which the Project is located.

17.06	Headings	A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

SECTION 00730 – TECHNICAL SPECIFICATIONS

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CONTRACT DOCUMENTS AND SPECIFICATIONS FOR WARREN COUNTY 2019 WELL REDEVELOPMENT PROJECT

October 2019

Warren County Water & Sewer Department 406 Justice Drive Lebanon, OH 45036

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Production Well Sod Farm #5 – Proposed

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Appendix B – Supplemental Information

FIGURE 7:

FIGURE 8:

East Well Field Information

Sod Farm Well Field Information

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SECTION 01010

SUMMARY OF WORK

PART 1 – GENERAL

1.1 LOCATION OF WORK

A. The work of this Contract is located in Warren County, Ohio at the following two wellfield locations:

Wellfield Name	Township	Address	Parcel No.
East Wellfield	Hamilton	6193 Striker Road	16 11 100 001
Sod Farm Wellfield	Hamilton	State Route 48	12 01 176 001

B. Access to the sites can be gained by contacting Chris Brausch, Warren County Project Manager, phone (513) 695-1193.

1.2 SCOPE OF WORK

- A. Furnish all materials, labor, equipment, and incidentals required to redevelop and test existing wells in the East and Sod Farm Wellfields as shown in the Contract Documents and/or specified herein.
- B. The Work includes, but is not limited to, the following:
 - 1. Redevelop and test Production Wells No. 1 and 9 located at the East Wellfield.
 - 2. Redevelop and test Production Wells No. 4 and 5 located at the Sod Farm Wellfield.
 - 3. Perform pumping tests on all redeveloped wells. The testing shall be in accordance with Ohio Administrative Code Section 3745-9-09 and shall include both step-drawdown and 24-hour constant rate pumping.
 - 4. Install new magnetic flow meters on Production Wells No. 1 and 9 located at the East Wellfield
 - 5. Install new magnetic flow meter on Production Well No. 4 located at the Sod Farm Wellfield
 - 6. Install new level sensor probes in Production Wells No. 1 and 9 located at the East Wellfield.
 - 7. Install new level sensor probes in Production Wells No. 4 and 5 located at the Sod Farm Wellfield
- C. All materials, equipment, skills, tools, and labor which is reasonably and properly inferable and necessary for the proper completion of the Work in a substantial manner and in compliance with the requirements stated or implied by these Specifications or

Drawings shall be furnished and installed by the Contractor without additional compensation, whether specifically indicated in the Contract Documents or not.

1.3 CONTRACTOR'S USE OF PREMISES

- A. Contractor shall limit the use of the premises for his/her work and for storage to allow for Owner occupancy and daily operation.
- B. Coordinate use of premises with Owner.
- C. If directed by the Owner, move any stored items, which interfere with operations.

1.4 PLANS AND SPECIFICATIONS

A. **Specifications**. The General Condition Section (No. 00700) contains requirements which govern the work. The Technical Specifications consist of three parts: General, Products, and Execution. Products and Execution modify and supplement these by detailed requirements of the work and shall always govern whenever there appears to be a conflict.

1.5 CONTINUOUS TREATMENT PROVISIONS

A. The Contractor shall comply with all laws, ordinances, rules, orders, and regulations relating to the performance of the work required to complete the Contract.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

END OF SECTION

SECTION 01040

COORDINATION

PART 1 – GENERAL

1.1 UTILITIES

- A. Coordinate Work with various utilities within Project limits in accordance with Section 00700.
- B. Ohio Utilities Protection Service
 - 1. Telephone: 1-800-362-2764
 - 2. Notify at least 48 hours in advance of construction.

1.2 PROJECT MEETINGS

- A. Progress Meetings:
 - 1. Owner will schedule regular progress meetings at site, conducted monthly to review Work progress, progress schedule, Shop Drawing and Sample submissions schedule, Application for Payment, contract modifications, and other matters needing discussion and resolution.
 - 2. Attendees will include:
 - a. Owner
 - b. Treatment Plant Operation Staff
 - c. Contractor
 - d. Other's as appropriate

1.3 OWNER'S OCCUPANCY REQUIREMENTS

A. Owner shall occupy the premises during the entire Contract period to conduct its normal operations. Cooperate with Owner in all operations to minimize conflict and to facilitate Owner usage.

1.4 OWNER FACILITIES

- A. Operation and Shutdown of Existing Facilities:
 - 1. The operation of any County owned valves or County owned equipment is strictly prohibited. Valves and County owned equipment shall only be operated by County personnel. For safety purposes, lock-out/tag-out procedures shall be followed for all valves isolating the wells.
 - 2. Due to the nature of the project, work may be performed on weekends and weekdays, excluding County recognized holidays. Work shall occur between the

hours of 7:00 AM to 5:00 PM./ Work conducted outside of regular hours shall occur only with prior written consent of Owner and shall only be approved to meet the project schedule and/or to avoid undesirable weather conditions.

3. Do not proceed with Work affecting the operation without obtaining the Owner's advance approval of the need for and duration of such Work.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

END OF SECTION

SECTION 01152

APPLICATION FOR PAYMENT

PART 1 – GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Submit Application for Payment to the Inspector and Owner in accordance with the project schedule contained in the Contract between the Owner and Contractor.
- B. The Contractor shall submit a Schedule of Values to be used as the basis for the Contractor's Application for Payment.

1.2 SUBMITTALS

- A. Submit to the Inspector and Owner applications with itemized data typed on 8-1/2-in by 11-in paper.
 - 1. The Schedule of Values format, line items, and monetary values shall be reviewed and approved by the Inspector and Owner.

1.3 PREPARATION OF APPLICATION FOR EACH PROGRESS PAYMENT

A. Application Form

- 1. Partial payment to the Contractor for work performed under a lump sum project shall be based on a schedule prepared by the Contractor and approved by the Inspector and Owner who shall apportion the lump sum price to the major components entering into or forming a part of the work under the lump sum price.
- 2. Fill in required information, including that for Change Orders executed prior to date of submittal of application.
- 3. Fill in summary of dollar values to agree with respective totals indicated on continuation sheets.
- 4. Execute certification with signature of a responsible officer of Contract firm.

B. Continuation Sheets

- 1. Fill in total list of all scheduled component items of Work, with item number and scheduled dollar value for each item.
- 2. Fill in dollar value in each column for each scheduled line item when work has been performed or products stored.
 - a. Round off values to nearest dollar, or as specified for Schedule of Values.
- 3. List each Change Order executed prior to date of submission, at the end of the continuation sheets.

- a. List by Change Order Number and description, as for an original component item of work.
- 4. To receive approval for payment on component material stored on site, submit copies of the original paid invoices with the application for payment.

C. Prevailing Wage and Subcontractor Payments

- 1. Prior to the first pay request the Contractor shall submit completed Prevailing Wage Notification to Employee Forms for all employees that will work under the Contract.
- 2. Each pay request shall be accompanied by a notarized Affidavit of Compliance certifying that the Contractor has complied with prevailing wage requirements of Chapter 4115 of the Ohio Revised Code and that no rebates or deductions have been or will be made, directly or indirectly from any wages paid in connection with this project, other than those provided by law.
- 3. Each pay request shall be accompanied by certified weekly payroll reports documenting the number of hours worked by employee, net pay, tax withholdings, and other deducted amounts provided by law.
- 4. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied to discharge Contractor's legitimate obligations associated with prior Applications for Payment.

D. Retainage

- 1. In accordance with ORC Section 153.12, partial payments to the Contractor for labor performed under either a unit or lump sum price contract shall be made at the rate of ninety-two percent of the estimates prepared by the Contractor and approved by the Engineer. All labor performed after the job is fifty percent completed shall be paid for at the rate of one hundred percent of the estimates submitted by the Contractor and approved by the Engineer.
- 2. When the major portion of the project is substantially completed and occupied, or in use, or otherwise accepted, and there exists no other reason to withhold retainage, the retained percentages held in connection with such portion shall be released and paid to the Contractor, withholding only that amount necessary to assure completion.

1.4 SUBSTANTIATING DATA FOR PROGRESS PAYMENTS

- A. When the Owner or the Inspector requires substantiating data, submit suitable information with a cover letter identifying:
 - 1. Project.

- 2. Application number and date.
- 3. Detailed list of enclosures.
- 4. For stored products:
 - a. Item number and identification as shown on application.
 - b. Description of specific material.

1.5 SUBMITTAL PROCEDURE

- A. Submit Applications for Payment to the Inspector at the times stipulated in the Agreement.
- B. Number: Two copies of each Application.
- C. When the Inspector finds Application properly completed and correct, he/she will transmit certificate for payment to Owner, with copy to Contractor.

PART 2 – PRODUCTS

Not Used.

PART 3 – EXECUTION

Not Used.

END OF SECTION

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SECTION 02737

WATER SUPPLY WELL REDEVELOPMENT

PART 1 – GENERAL

1.1 SCOPE OF WORK

A. **General**. Provide the labor, tools, equipment, chemicals, and materials necessary for the rehabilitation of four drinking water production wells located at two different well fields in Warren County. The work generally consists of pump removal, video inspection of the well screen and casing, chemical and mechanical redevelopment of the wells, step down and 24-hour pump testing, flow meter replacement, and level sensor replacement. The following work shall be performed on each of the wells:

East W	ell Field	Sod Farm Well Field		
Production Well 1	Production Well 9	Production Well 4	Production Well 5	
Pre-cleaning video inspection Pump tear down & inspection Well Rehabilitation Post-cleaning video inspection Drawdown pump testing Replace flow meter Replace level sensor	Pre-cleaning video inspection Pump tear down & inspection Well Rehabilitation Post-cleaning video inspection Drawdown pump testing Replace flow meter Replace level sensor	Pre-cleaning video inspection Pump tear down & inspection Well Rehabilitation Post-cleaning video inspection Drawdown pump testing Replace flow meter Replace level sensor	Pre-cleaning video inspection Pump tear down & inspection Well Rehabilitation Post-cleaning video inspection Drawdown pump testing Replace level sensor	

1.2 SCHEDULE OF WORK

- A. Perform the Work in accordance with the time for completion stated in the Contract.
- B. Notify the Owner one work week in advance of initiating well rehabilitation activities.
- C. Comply with the following sequencing conditions:
 - 1. Only one well from the Sod Farm Well field may be removed from service by the Contractor at any one time.

1.3 QUALITY ASSURANCE

A. **General**. Perform all work in conducting the well redevelopment in compliance with Ohio Administrative Code (OAC) 3745-9-09, AWWA A-100 Water Well Standard, and other appropriate codes and standards, applicable requirements of governing agencies having jurisdiction, and according to the information specified herein.

1.4 Existing Well Information

A. The following table contains information on the wells, screen, and pumps. Additional data including the ODNR Well Log and Drilling Reports and construction drawings are including in the Appendix B.

County Well ID	Date Drilled	ODNR Log #	Casing Material	Casing Length (ft)	Casing Diameter (in)	Screen Length (ft)	Well Depth (ft)	Screen Material	Pump (gpm)	Pump Type	Pump Make & Model	Pump Depth of Placement (ft)
						East Wo	ell Field					
PWE-1	5/15/61	266001	Steel	51	12	25	61	Stainless Wire Wrapped .125"	600 @ 212'	Vertical Turbine	J Line, Model 55JDRZ6 WL- 6 Stage	30.1
PWE-9	11/30/99	874308	Steel	48	20	15	48	Stainless Wire Wrapped .180"	900 @ 212'	Vertical Turbine	J Line, Model 12 LCZ6 WL- 6 Stage	28.8
						Sod Farm	Well Field	l				
PWS-4	1/6/95	798067	Steel	67	16	50	102	Stainless Wire Wrapped .040"	900@ 283'	Vertical Turbine	J Line, 12LCZ6-WL- 6 Stage	47.8
PWS-5	3/14/06	2004138	Steel	62.5	16	30	91	Stainless Wire Wrapped .080"	900@ 283'	Vertical Turbine	Peerless, Model 12 MB/6	63

1.5 SUBMITTALS

- A. Submit information regarding the proposed rehabilitation procedures including equipment, methods, and chemicals to be utilized.
- B. Submit Safety Data Sheets for all chemicals to be stored on site and used during the work.
- C. Provide the manufacture pump curve for the pump used for redevelopment and draw down testing.
- D. Provide O&M Manuals for flow meters and level sensors.
- E. Provide digital video and written report of the camera downhole well inspections.
- F. Provide final report for each well documenting the redevelopment work at each site and the test pump results.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. **Packaging and Shipping**. The well rehabilitation materials and chemicals shall be packed, shipped, and delivered to the project site in a clean, undamaged, and environmentally safe condition. Take all precautions necessary in order to adhere to applicable manufacturer's and supplier's recommendations and requirements.
- B. Acceptance at Site. The well rehabilitation materials and chemicals shall be accepted for use at the site by the Owner only if they have been properly packed, shipped and delivered to the project site.
- C. **Storage**. Store the well rehabilitation materials and chemicals in a clean, dry, and environmentally safe condition, out of flood prone areas. Provide and maintain these conditions until the materials and chemicals are used.

1.7 PRIVATE & STATE LAND

- A. The Contractor shall not enter or occupy private land outside of easements, except by permission of the land owner.
- B. The Contractor shall not access the East Wellfield from the State of Ohio, ODNR bike trail unless written authorization is obtained from ODNR. The use of the bike trail is regulated by Melissa Clark, ODNR Manager of Little Miami Parks (937) 408-8554.

1.8 HISTORIC WELL PRODUCTION TEST RESULTS

Date	Well#	Actual GPM	Static Level (ft)	Draw Down Level (ft)	Draw Down (ft)	Specific Capacity (gpm/ft)
5/15/61	PWE-1	520	16.3	26.3	10	52.0
3/2/01	PWE-1	328	18.5	23.17	4.67	70.2
3/2/01	PWE-1	517	18.5	26.83	8.33	62.1
3/2/01	PWE-1	608	18.5	29.25	10.75	56.6
3/2/01	PWE-1	692	18.5	31.67	13.17	52.5
12/23/99	PWE-9	1350	18	36.00	18	75.0
12/9/94	PWS-4	495	15.7	22.13	6.46	76.6
12/9/94	PWS-4	805	15.7	26.21	10.54	76.4
12/9/94	PWS-4	1100	15.7	30.42	14.75	74.6
12/9/94	PWS-4	1348	15.7	33.83	18.17	74.2
1/6/95	PWS-4	1100	15.7	31.08	15.42	71.4
5/6/00	PWS-4	500	14.5	19.92	5.42	92.3
5/6/00	PWS-4	807	14.5	24.08	9.58	84.2
5/6/00	PWS-4	1108	14.5	28.00	13.50	82.1
5/6/00	PWS-4	1348	14.5	31.69	17.19	78.4
5/2/06	PWS-5	523	19.56	24.86	5.3	98.7
5/2/06	PWS-5	900	19.56	29.16	9.6	93.8
5/2/06	PWS-5	1350	19.56	34.46	14.9	90.6

1.9 WELL PROTECTION

- A. All well holes shall be adequately safeguarded by providing temporary barricades, covering, caution signs, lights, and other means to prevent accidents to persons, contamination of the well, damage to property, and keep wildlife from entering the wells.
- B. The Contractor shall take precautions to prevent injury to the public due to open well holes. All exposed well holes shall be mechanically sealed when the Contractor is not on site. All equipment, chemicals, or other hazards which could be dangerous to the public, shall be locked and secured away from the public.
- C. The contractor shall provide night lighting when 24-hour pump testing is performed.

1.10 SITE INVESTIGATION

A. The Contractor confirms that a site investigation/visit has been preformed to observe the existing conditions at the site of work, the type of equipment required to perform the work, the quality and quantity of the materials furnished insofar as this information is reasonably ascertainable from the inspection of the site, as well as from information presented herein. Any failure of the Contractor to acquaint themselves with available information will not relieve them from the responsibility for estimating properly the difficulty or cost of successfully performing the work. The Owner assumes no responsibility for any conclusion or interpretation made by the Contractor on the basis of the information made available by the owner.

1.11 UTILITIES

- A. **Electricity** Electricity may not be readily accessible at all well sites. Temporary electric service may be available from the local power panels at each well. Contractor shall be responsible for all temporary connections. Provide temporary electric service as required if sufficient service is not available.
- B. Water Untreated production water is available at each well field. When connecting to the Owner's facilities the Contractor shall install a double check backflow prevention assembly (ASSE 1015). The Owner shall not charge the Contractor for water usage. Water can be obtained from the following Locations.
 - 1. **East Well Field** Water can be obtained from the hydrant located near Production Well No 4.
 - 2. **Sod Farm Well Field** Water can be obtained from the 4-inch flushing connection located on Well No 5.
- C. **Sanitary** Sanitary facilities are not available at any of the well sites. Contractor shall provide temporary bathroom facilities. Temporary facilities shall be located a minimum of 300-feet from any and all well structures.

1.12 USE AND STORAGE OF CHEMICALS

- A. Set up necessary supply and neutralization tanks adjacent to the wells or other convenient location acceptable to the Owner. Tanks shall be provided with secondary containment provisions with approved setback distance from existing wells and the Little Miami River.
- B. All equipment, such as the neutralization tank and any hose or piping which traverses over land, must also be delineated with caution tape, cones, signs, or sawhorses. If possible, where a hose or piping may cross a path or access road, it shall be covered by boards or suitable materials as to prevent punctures or leaks.
- C. Review Safety Data Sheets (SDS) for all chemicals intended for use in redevelopment work with workers prior to delivery. Maintain copies of the SDS at designated locations in accordance with regulatory agency requirements. Review SDS with workers at appropriate intervals.

1.13 PROTECTION OF PROPERTY AND UTILITIES

A. The Contractor shall be responsible for the preservation of all public and private

property and utilities (including poles, signs, service to buildings, gas pipes, water pipes, electrical cable, hydrants, sewers, drains, communication cables, etc.), and shall use every precaution necessary to prevent damage thereto. If any direct or indirect damage is done to public or private property or utilities by any account of any act, omission, neglect, or misconduct in the execution of the work on the part of the Contractor, such property or utility shall be restored by the Contractor, at their expense, to a condition similar or equal to that existing before the damage was done, or they shall make good the damage in another manner acceptable to the County.

B. The Contractor shall be responsible for repairing damage to public and private access drives and roadways leading to and from the well fields caused by their activities. Access drives and roadways shall be repaired to a condition similar or equal to that existing before the damage was done.

1.14 CLEANUP AND DISPOSAL OF EXCESS MATERIAL

A. During the course of the Work, the Contractor shall keep the work site in as clean and neat a condition as is possible Dispose of all residue and, at the conclusion of the work, remove and haul away any other refuse remaining from the work and leave the entire site of the work in a neat and orderly condition.

1.15 PROCESS WATER DISPOSAL

- A. Contractor shall provide all licenses and permits required for the Work. All Work shall be performed in accordance with permit limitations, and all Federal, State, and Local regulatory requirements.
- B. Dispose of test pump water, chemical cleaning water, and other discharge water in accordance with regulatory requirements.

1.16 WARRANTY

- A. All labor and materials supplied under this Section shall be warranted for a period of one (1) year by the Contractor and material manufacturers. The manufacturer's warranty period shall run concurrently with the Contractor's warranty period and shall commence on the Substantial Completion Date of each well.
- B. The materials shall be warranted to be free from defects in workmanship and design. Any materials that fail during the warranty period shall be replaced and the unit(s) restored to service at no expense to the County.

PART 2 – PRODUCTS

2.1 WELL REHABILITATION CHEMICALS

A. Chemicals, admixtures, and products used during rehabilitation shall be suitable for use in water supply wells. Redevelopment of wells can be accomplished using acid or chemical dispersants that have standard ANSI/NSF60 certification. Contractor shall

procure all licenses and permits required for the Work.

- B. Dispersants that contain phosphorous compounds shall not be permitted.
- C. Chemical cleaning shall be accomplished through mechanical surging of commercial grade muriatic acid (industrial grad hydrochloric acid) at a 31% concentration. Sufficient quantities shall be supplied to clean the well screen slits, gravel pack, and well column. Provide sufficient quantities of muriatic acid to completely fill the screen volume of each well. Provide the following quantities for rehabilitation purposes:

Well No	Gallons	55 Gallon Drums
EWF 1	150	3
EWF 9	250	5
SOD 4	530	10
SOD 5	320	6

D. Chemical cleaning shall be accomplished through mechanical surging of commercial grade sodium hypochlorite at a 12.5% concentration. Sufficient quantities shall be supplied to clean the well screen slits, gravel pack, and well column. Provide sufficient quantities of sodium hypochlorite to fill half the screen volume of each well. Provide the following quantities for rehabilitation purpose:

Well No	Gallons	55 Gallon Drums
EWF 1	75	2
EWF 9	125	3
SOD 4	265	5
SOD 5	160	3

- E. Sufficient quantities of commercial grade soda ash, sodium thiosulfate, or other chemicals approved by Warren County shall be provided to neutralize and dechlorinate water that is pumped from the well during redevelopment.
- F. Base bids shall include those chemicals listed above and in the quantities specified herein. The use of alternate chemicals including acids, surfactants, polymers, or chelating agents can be proposed as alternate bids.

2.2 VIDEO CAMERA EQUIPMENT

- A. Video camera equipment shall be submersible, closed circuit television (CCTV) camera, full color, lighting with lens that rotates 360 degrees for inspection in any field of view within well casing.
- B. Recording equipment shall be above ground with computer link for data entry recording in DVD and thumb drive format, full color, video display with on screen footage display, capable of producing full color still photographs.

2.3 PUMPS & WELL FLOW TESTING

- A. Provide submersible or vertical turbine pumps for constant rate and step-drawdown testing.
- B. Any electric generator used for the test pumping shall have the necessary capacity fuel to adequately power the selected test pump through the pumping period.
- C. Discharge pipe shall be of a diameter and length adequate to transfer water from the test site to discharge points located away from the wellfield and adjacent to the Little Miami River or Turtle Creek. Provide matting, energy dissipaters, or rip rap to minimize erosion at the discharge points. Discharge pipe shall be in good condition and shall not have any significant leaks. Discharging water into the wellfield shall not be permitted.
- D. Hoses and piping shall be rated for required operating pressures and chemical solution concentrations.
- E. The flow rate shall be measured using an orifice weir and manometer, or equivalent method acceptable to the County and Ohio EPA.
- F. Provide a gate valve suitable for controlling discharge through the discharge pipe. Valve size shall match discharge pipe size.
- G. Provide portable calibrated electric water level probes for water level measurements during testing. Probes shall be installed at the test well and monitoring wells identified in Section 3.3. Probes shall read and record data every minutes and data shall be stored as a comma separated value (.csv) file.
- H. Provide portable direct readout monitors with sensors for pH, chlorine residual, and chemical solution concentrations.

2.4 WELL LEVEL PROBES

- A. Remove and replace the level probes on all four wells.
- B. The transducer shall consist of a piezoresistive sensing element, encased in a 316 SS housing. It shall come equipped with a 270-pound tensile strength, shielded, vented cable. Ventilation tube in the cable must automatically compensate for changes in atmospheric pressure. The vent must be protected with a maintenance free filter eliminating particulate or water droplets from entering the transducer. The unit must incorporate lightning and surge protection utilizing dual arrestor technology, grounded to case, eliminating both power supply surges and lightning ground strike transients.
- C. The sensing element shall be capable of fitting through the existing ports.
- D. Range for all probes is 0 to 50ft., shall be accurate to +/- 0.25%, and provide a 4 to 20 mA DC output signal.
- E. Probes shall be equipped with a cable that extends a range of 100 feet. Field verify the required cable length.

- F. Install probes at the depths shown in Appendix A.
- G. Probe shall be GE Druck PTX1830, Dwyer Instruments Model SBLT2, or equal.

2.5 WELL FLOW METERS

A. Install new electromagnetic induction type flow meters, described herein, on the discharge piping as listed below and shown in Appendix A. Contractor to field verify all flow meter sizes and cable lengths.

Well	Flow Meter Size	Cable Kit for Remote Mount: Length*
PWE-1	6-inch	33-feet
PWE-9	8-inch	33-feet
PWS-4	8-inch	33-feet

B. Sensor:

1. Operating Principle: Utilizing Faraday's Law of Electromagnetic Induction, the flow of liquid through the sensor induces an electrical voltage that is proportional to the velocity of the flow

2. Construction:

- a. The sensor flow tube shall be 304 stainless steel surrounded by two coils.
- b. Linear material shall be EPDM line that is approved by NSF/ANSI Standard 61 for drinking water purposes.
- c. Measurement and grounding electrodes shall be Hastelloy C-276.
- d. Connecting flanges shall be 150 lb carbon steel.
- 3. Installation: A minimum of 4 pipe diameters upstream and 3 pipe diameters downstream.
- 4. Operating Temperature: -4°F to 158°F.
- 5. Size: As listed in 2.5.A above.

C. Signal Converter:

- 1. Type: NEMA 4X enclosure
- 2. Display: Background illumination with alphanumeric 3-line, 20 character displace to indicate flow rate, totalized values, setting.
- 3. Power supply: 115/230 VAC or 11-24 VCD.
- 4. Operating Temperature: -4°F to 140°F.
- 5. Outputs: 0-20 mA and 4-20 mA into 800 ohms max. One relay rated at 42 VAC/SA

24DC/1A. Digital (frequency or pulse) for external display of flow rate or totalizer.

6. All programming shall be accomplished through an integral keypad with press buttons.

D. Sensor and Signal Performance:

- 1. Flow rate: 0.1 m/s (0.3 ft/s) to 12 m/s (39 ft/s)
- 2. Meter shall have an accuracy of 99.6%.
- 3. Bi-directional flow capabilities shall be standard.

E. Totalizer

1. Two eight-digit counters for forward, net, or reverse flow.

F. Manufacturer/Model

1. The electromagnetic flow meter shall be a Siemens Model MAG 5100W flow sensor with a Siemens Model MAG 5000 or 6000 signal converter. Insertion type flow meters will not be accepted.

G. Calibration

1. SENSORPROM® Memory Unit

- a. Each flow sensor shall be wet calibrated and all of the calibration information and factory settings matching the sensors shall be stored in an integrally mounted SENSORPROM® memory unit.
- b. The SENSORPROM® shall store sensor calibration data and signal converter settings for the lifetime of the product.
- c. A initial commissioning, the flow meter commences measurement without any initial programming.
- d. Any customer specified settings are downloaded to the SENSORPROM[®].
- e. Should the signal converter need to be replaced, the new signal converter will upload all previous settings and resume measurement without any need for reprogramming or rewiring.
- 2. A certificate of calibration shall accompany each flow sensor.
- 3. Programming of the transmitter shall be performed by pressing buttons on a keypad.

H. Signal Converter Function

- 1. The following functions shall be provided with the signal converter:
 - a. All programming shall be accomplished through an integral keypad with press buttons, meter requiring a magnetic probe for programming will not be accepted.

- b. All programming shall be protected by a user defined password.
- c. The signal converter shall be integrally mounted or remotely mounted using a remote mount kit provided by the manufacturer.
- d. The signal converter shall provide a 0-4-20 mA DC signal proportional to flow rate into 800 ohms max. Output shall be selectable as unidirectional or bidirectional.
- e. The relay shall be programmable as error indicator, limit alarm, or pulsed output.
- f. The signal converter system shall be equipped with an error and status log with four groups of information.
 - 1) Information without a functional error involved.
 - 2) Warnings which may cause malfunction in the application.
 - 3) Permanent errors, which may cause malfunction in the application.
 - 4) Fatal error, which is essential for the operation of the flow meter.
- g. A system error shall be indicated by a flashing icon on the display or activation of the relay when set as an error alarm.
- h. The first nine standing errors shall be stored in the error pending log. A corrected error is removed from the error pending log. A status log shall be provided to store the last nine error messages received for 180 days regardless of correction.

PART 3 – EXECUTION

3.1 VIDEO SURVEY

- A. A downhole video survey shall be conducted upon removal of the County's pump and prior to conducting well rehabilitation. This video survey shall be conducted only when turbidity level allow a clear visual inspection of the interior of the well. It is likely that the water within the well casing and careen will be made cloudy by the removal activities. The well shall remain idle for a minimum period of 12 hours prior to video inspection unless otherwise approved by the County.
- B. The particular goals of the inspection activities include, but are not limited to, the following:
 - 1. To visually determine the structural integrity of the well casing and screen and to assess the condition of the screen including quantifying the amount of debris and buildup along the screen slots.
 - 2. To verify well construction information including depth to top of screen, screen length, and actual well depth.
- C. Provide two copies of all recordings, in color, to the County for review and permanent records. Specific measurements including the depth of the top of the well screen and comments on the screen conditions including description of any biofilm and/or encrustation observed, shall be made at the time the inspection in conducted in a

manner clearly audible upon subsequent playing of the recording.

- D. Submit to the County a letter outlining the finding of the video survey including deficiencies or variations from available well records, structural damage to the well or well screen, and any required remedies. Subsequent redevelopment work shall not commence until the County has discussed the results of the inspection work with the Contractor and has given approval to proceed.
- E. The Contractor shall lower and raise the camera at a sufficient rate of speed to avoid disturbance and suspension of sediment within the well. If the rate of speed creates turbidity within the well, the equipment shall be removed. Reconduct the test and inspection after suspended sediment has settled. The additional test and inspection shall be conducted at the Contractor's expense.
- F. Upon completion of the well redevelopment a repeat of the video inspection, as described above, shall be conducted to show the results of the redevelopment work and any well condition that was not readily identifiable in the initial video.

3.2 WELL PUMP INSPECTION

- A. Once removed from the well, the Contractor shall disassemble the pumping system for inspection. This includes the bowl assembly, column pipe, discharge head, and motor. Insulation resistance reading of the motor shall be taken and recorded to determine if the resistance is within manufacturer's parameters. A detailed written report shall be prepared outlining conditions of the well system components and recommending for needed repairs/replacement.
- B. Prior to reinstalling the pump, Contractor shall sand blast and epoxy paint the pump discharge head, column piping and motor. Contractor shall sand blast, paint, and rebuild the stuffing box with new packing and adjust the gland to form at tight seal.
- C. The County may authorize and direct the Contractor to replace worn and malfunctioning items pending the recommendations contained in the detailed report. Well pump and motor repairs are beyond the scope of this project and if needed shall be performed as a change order to the Contract, at the pricing identified in the Alternate Bids.

3.3 WELL REDEVELOPMENT

- A. The general methods to be used for the reconditioning procedures are as follows for each well:
 - 1. The reconditioning procedures shall combine the physical surging of the well screen area using dual disc surge tools along with chemical treatment. The surge tool shall contain two surge discs, each consisting of a rubber disc sized to within one half inch of the screen inside diameter sandwiched between two smaller diameter discs to attain an adequate rigidity. The discs shall be located no further than 4 feet apart if fixed, but can be less if methods are employed to raise and lower only the bottom

disc in a repetitive cycle. Minimum equipment requirements are that the equipment shall be capable of producing a rhythmic stroking action (as associated with standard percussion type drilling rigs). The equipment to be utilized shall provide a 30-inch vertical stroke or longer and be capable of operating through an adjustable range from 20 to 40 strokes per minute. The surge tool itself, shall be capable of being lowered into the well screen with a complete string of pipe attached to the surface, to facilitate its required up and down movement.

- 2. After removal of the existing pumping equipment, video inspection of the existing well, and wire brush cleaning of the screen, the developing tools will be assembled and set in the well.
- 3. Injection of the proposed redevelopment chemicals will be done through the development tools once they are set to depth within the well.
- 4. The existing electrical power at each of the respective well locations may be used to perform the work. If electric power is not available at the well site, the Contractor shall be responsible to provide portable power supply to operate equipment.
- 5. Upon completion of the chemical surging efforts, all spent chemicals, dissolved minerals, fine sediments, and other foreign matter shall be removed from well by airlifting procedures while simultaneous continuous surging. Flow from the well shall be discharged into a 1,500 gallon temporary holding tank(s), and neutralized prior to being discharged.
- 6. The Contractor shall provide all materials required for the neutralization of chemicals including the holding tank(s), neutralization chemicals, pH, and chlorine test kits, and sufficient discharge hose to transfer the waste water away from each site to the designated point of discharge.
- 7. Once the development effort is complete, the development tools will be removed from the well and the well disinfected by the addition of chlorine into the well casing and screen. The wellhead will then be secured to prevent foreign matter from enter the well.
- 8. Upon completion of all work, a written report will be prepared and submitted to the County. The report will contain all information regarding the redevelopment procedures, chemical solutions used, results of the cleaning efforts, and test pumping results.
- B. The chemical treatment and well redevelopment steps shall be as follows:

1. Step 1 – Video Inspection & Pretreatment

- a. <u>Video Inspection</u> After removal of the pump and prior to any rehabilitation work, perform a down hole video survey.
- b. <u>Pretreatment</u> Pretreat the well screen by wire brushing the screen with approximately twelve passes along the entire screen length. The diameter of the brush shall be sized approximately for the diameter of each well screen. All

material that has settled to the bottom of the screen and in suspension within the well shall be removed by pump or air lift and disposed using appropriate methods according to Federal, State, and local requirements.

2. Step 2 – Surging with Muriatic Acid

a. <u>Injection of Acid Solution and Surging</u> – Inject a volume of hydrochloric/ muriatic acid into the well to create a strong acid solution within the screened section of the well. Add acid throughout the surging process in quantities identified in Paragraph 2.1.C to maintain a strong solution within the well screen and surrounding gravel pack.

Work the acid solution through the formation materials surrounding the well screen by straight surging (without removal of the materials from the well) using the double agitator surge blocks. Continue the surging operation during which time the surge blocks will be moved throughout the screened section of the well. Surge evenly throughout the length of the screen. Allow the chemicals to remain in the well overnight.

Removal of the acid shall be accomplished by blowing the chemical with compressed air while continuously surging the well. This blow out process shall progress continuously throughout the screen section of the well.

The chemical surging and blow out removal of the acid solution shall occur over the following periods:

Well No	Chemical Addition & Surge	Chemical Removal & Blow Out
EWF 1	8 Hours	8 Hours
EWF 9	4 Hours	4 Hours
SOD 4	16 Hours	16 Hours
SOD 5	8 Hours	8 Hours

SOD 4 well with screen length of 50 feet shall be redeveloped in two steps that focuses work on the top and bottom halves of the screen. The top half of the screen shall be straight surged for 8-hours with the chemical solution remaining overnight and then purged from the well the following day over an 8-hour period. Once completed, the bottom half of the well screen shall be redeveloped using the same method.

b. <u>Chemical Disposal</u> – Spent acid solution from the well shall be discharged into a temporary holding tank. Neutralize solution to a pH between 6.5 and 7.5 by the addition of hydrated lime, and discharge to waste. Continue the pumping operation until the water pumped from the well has a pH level of approximately 6.5.

3. Step 3 – Surging with Sodium Hypochlorite

a. <u>Inject Chlorine Solution and Surging</u> – Inject a volume of sodium hypochlorite solution into the well to create a strong solution within the screen section of the well. Add chlorine throughout the surging process in quantities identified in Paragraph 2.1.D to maintain a strong oxidizing solution within the well screen and surrounding gravel pack.

- Work the chlorine solution through the formation materials surrounding the well screen by straight surging the well using the double agitator surge blocks in the same manner, method, and time extents described in STEP 2.
- b. <u>Chemical Disposal</u> Spent chlorine solution from the well shall be discharged into the temporary holding tank. Dechlorinate the solution by adding sodium bisulfate or sodium thiosulfate, and discharge to waste. Continue the pumping operation until the water pumped from the well has a negligible chlorine concentration.

4. Step 4 – Post Cleaning TV Inspection

- a. Post Cleaning TV Inspection Remove the development tools from the well and perform a post cleaning TV inspection. The equipment to be used for this task will be the same used for the initial verification of well data. Record the post-cleaning inspection on DVD and/or thumb drive and provide to the County.
- 5. <u>Step 5 Final Well Capacity Testing</u> Perform step drawdown and 24-hour pump testing to obtain sufficient hydrogeological information to evaluate potential pump upgrades at each well site. The step down test shall conform to the following:
 - a. Record the depth at which the pump used for the test is set.
 - b. Each step shall be run at a constant pumping rate for no less than one hour. Step pumping rates (gallons per minute) for each well shall be as follows. Step pumping shall cease if water levels drop to the screen.

PWE-1	PWE-9	PWS-4	PWS-5
800	800	800	800
1100	1100	1100	1100
1350	1350	1350	1350
1700	1700	1700	1700
2550	2100	2200	2200
		3000	3000

- c. Constant 24-hour pump testing rates for each well shall be established by the County after the completion of the step draw down testing.
- d. During both the step drawdown and constant rate pumping test, water levels measurements shall be taken from the well being pumped and from the surrounding monitoring wells starting from the static water level and continuing during drawdown to the nearest 0.1 foot, as measured from an identified datum.
- e. Water level measurements shall be collected at 1-minute intervals throughout the well testing and at the following locations:

PWE-1	PWE-9	PWS-4	PWS-5
MW-1	MW-1	MW-1D	MW-1D
TW-1		MW-2D	MW-7D
		OW-1	MW-8D
		OW-2	OW-1

- f. Immediately after completion of the 24-hour test, additional pump testing shall occur to determine aquifer levels with multiple pumps in operation. During this 2-hour testing the County shall turn on production wells as the test well continues to operate, water level measurements shall be collected at 1-minute intervals throughout this test period.
- g. Recovery water level measurements shall be taken immediately after termination of the constant rate pumping at 1-minute time intervals until the water level has recovered to at least ninety percent of the drawdown caused by the pumping test, twenty-four hours after the completion of the pumping test, or recovery is interrupted by pumping of another well, whichever occurs first.
- 6. <u>Step 6 Well Disinfection</u> After the well has been rehabilitated, modifications completed, and the Owner's pump and motor reinstalled, disinfect the well with chlorine. Inject chlorine solution creating a 500 ppm concentration within all parts of the well in accordance with Chapter 119, Section 6111.42 of the Ohio Revised Code and Chapter 3745-9-08 of the Ohio Administrative Code.
 - a. Prepare and apply chlorine solution in accordance with the requirements of AWWA standards. Using the installed pump, surge the well to insure proper distribution of the disinfectant.
 - b. After a minimum of 24 hours and before 48 hours has elapsed, the well shall be pumped free of chlorine as indicated by a negligible chlorine residual, and in preparation for water quality sampling to be performed by the County. Dechlorinate the solution prior to discharge to waste, as required by the Ohio EPA.
 - c. The County shall collect and test bacteriological samples from the wells. Should the wells fail to pass bacteriological testing the Contractor shall perform the disinfection process again and/or perform extended flushing of the wells until two series of bacteriological samples collected in 24 hours yield negative test results for the presence of bacteria.

3.4 FINAL REPORT

- A. Upon completion of the redevelopment procedures at each well installation, prepare and submit in duplicate a written report to the County for permanent records. The report shall contain all procedure and results of the redevelopment effort, including all pumping and water level data recorded throughout the testing. Include copies of the well inspection video with the final report. The report should contain the following:
 - 1. Map showing the location of the pumping wells and the location of the other wells used to observe drawdown. The map shall, at a minimum, include the names of the wells as used in the report and the distance between the pumping wells and other wells used to observe drawdown.
 - 2. Graphs plotted on semi-logarithmic graph paper showing the drawdown measurements on the arithmetic scale and time on the logarithmic scale. Graphs must be submitted for the pumping well and any other wells used to observe drawdown and recovery during the pumping test.
 - 3. Table that summarizes the step down test results listing the flows, drawdown, and

- specific capacities.
- 4. Graphs plotted on semi-logarithmic graph paper showing the recover measurements on the arithmetic scale and time on the logarithmic scale. Graphs must be submitted for the pumping well and any other wells used to observe drawdown and recovery during the pumping test.
- 5. Determine pump upgrades that will increase the permanent pumping capacity of the wells while at a minimum maintaining the operational capacity of the well field and without degrading the water quality of any well in the well field.
- 6. Based on the well pump test, include an analysis of the effects of interference drawdown from other wells owned by the County and the effects of interference on the recommenced permanent design pumping rates.
- 7. Recommendations on the maximum capacity the well can be sized for based on the following:
 - a. Screen Rating in accordance with Ohio Administrative Code 3745-9
 - b. Drawdown Limits
 - c. Largest practical pump that can fit in well.
 - d. Include a table that summarizes the maximum rated capacity of the well for each of the above components.
- 8. Include the plumb and alignment test results of the wells and a discussion regarding the maximum size of a vertical turbine pump that can fit down the well.

3.5 MAGNETIC FLOW METER INSTALLATION

- A. Sod Farm Well #4 (PWS-4):
 - 1. The Mag Meter display is to be mounted on top of the well platform away from the control cabinet and the swing of its door.
 - 2. Mag Meter display unit is to be mounted to a backplane in a NEMA 4 rated fiberglass Display Box with a window, dimensions 18"x14"x9", large enough to fit transmitter and associated equipment.
 - a. Manufacturer: Hoffman Catalog Number A18149JFGQRPWR or equal.
 - 3. Located in the PLC Cabinet Using the Breaker Panel in the PLC/CP Cabinet:
 - a. Install a 20 amp CB in a spare slot.
 - b. Install #12THNN stranded wire to a din rail mounted 120v 1 amp filter, Eaton Aegis series power line filter., 120 VAC, 1-phase, 1A, 35 mm DIN Rail Mount, EMI/RFI filtering, LED indication, 5kA SCCR or equivalent.
 - c. Install wiring from filter in step "b" to a 1 amp breaker, Eaton Part # FAZ-C1-1-NA-S or equivalent; with #12 THNN stranded wire. Contractor to field verify breaker size.
 - d. Install appropriate power wiring from breaker in step "c" to the flow meter display unit.
 - e. Run a 16 AWG shielded twisted single pair wire, 4 to 20 mA signal wire from

- the flow meter display unit to the control cabinet with sufficient length to connect at designated terminal blocks.
- 1) Warren County Personnel will terminate connection to terminal blocks.
- f. Power wires and 4 to 20 mA wires to be ran in separate conduit. Permissible to use existing conduit as long as wire runs have been identified as power or signal, and approved by Owner.

4. Display to Flow Tube Signal Wire:

- a. All conduits are ³/₄-inch unless permission is given from the Owner in writing.
- b. The Conduit run is mounted below the platform grating to prevent a trip hazard.
- c. No conduit supports are permitted to be mounted to the vertical pipe.
- d. All new conduit connections are on bottom side.
- e. All lengths of wire are to be verified by the Contractor.

B. East Well #1 & 9 (PWE-1 & PWE-9)

- 1. The Mag Meter display is to be mounted on top of the well platform, away from any control cabinet, and the swing of its door.
- 2. Mag Meter display unit is to be mounted to a backplane in a NEMA 4 rated fiberglass Display Box with a window, dimensions 18"x14"x9", large enough to fit transmitter and associated equipment.
 - a. Manufacturer: Hoffman Catalog Number A18149JFGQRPWR or equal.

3. Located in the Line in Power Junction Box

- a. 120 VAC Line power will come from the lighting circuit that's located in the Power Feed Cable J Box (wire nutted to a 3 conductor #8 stranded cable, with ground) to the left of the control cabinet.
- b. Use Din Rail mounted terminal blocks to land the feed circuit in the Power Feed cable J box.
- c. Connect the light pole circuit to the bottom of the terminal blocks.
- d. Run new feed for flow meter from terminal blocks in step 3 to a din rail mounted 120v 1 amp filter, Eaton Aegis series powerline filter, 120 VAC, 1-phase, 1A, 35mm DIN rail mount, EMI/RFI filtering, LED indication, 5kA SCCR or equivalent. Permissible to locate equipment in NEMA 4 fiberglass box.
- e. Install wiring from filter in step 4 to a 1 amp breaker, Eaton PART# FAZ-C1-1-NA-S or equivalent, with #12 THNN stranded, contractor to verify breaker size.
- f. Install appropriate power wiring from breaker in step 5 to the Flow meter display unit.
- g. 16 AWG shielded twisted single pair wire, 4 to 20 mA signal wire, ran from flow meter display to control cabinet sufficient length to connect at designated terminal blocks. Warren County Personnel will terminate connection to terminal blocks.
- h. Power wires and 4 to 20 mA wires to be ran in separate conduit. Permissible to use existing conduit as long as wire runs have been identified as power or

signal, and approval from owner.

- 4. Display to Flow Tube Signal Wire
 - a. All conduits are ¾-inch unless permission is given from the Owner in writing.
 - b. The Conduit run is mounted below the platform grating to prevent a trip hazard.
 - c. No conduit supports are permitted to be mounted to the vertical pipe.
 - d. All new conduit connections are on bottom side.
 - e. All lengths of wire are to be verified by the Contractor.

END OF SECTION

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APPENDIX A

Contents:

FIGURE 1:	Production Well East #1 – Existing
FIGURE 2:	Production Well East #1 – Proposed
FIGURE 3:	Production Well East #9 – Existing
FIGURE 4:	Production Well East #9 – Proposed
FIGURE 5:	Production Well Sod Farm #4 – Existing
FIGURE 6:	Production Well Sod Farm #4 – Proposed
FIGURE 7:	Production Well Sod Farm #5 – Existing
FIGURE 8:	Production Well Sod Farm #5 – Proposed

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WATER LUBRICATED TURBINE PUMP MATERIALS OF CONSTRUCTION (STANDARD AND SPECIAL)

<u> </u>	WATER LUBRICATED	STANDARD CONSTRUCTION	SPEC	IAL BOWL CONSTRU	ICTION
KE NO	DESCRIPTION	STANDARD MATERIAL	CAST IRON BOWLS AND IMPELLERS	ALL IRON CONSTRUCTION	BRONZE BOWLS AND IMPELLERS
1	Discharge Head	Cast Iron (ASTM A48 CL30)			
_2		Cast Iron (ASTM A48 CL 30)			_
3	Head Column Flange Gasket	Composition RUBBER S	EE LETTE	R)	
-4	Studs (Head Column Flange Assembly) (optional)	Steel (C-1137)		_	
5	Nuts (Used with Key No. 4 Head Column Flange Assembly) (optional)	Low Carbon Steel (ASTM A307)			
6	Head Discharge Flange	Cast Iron (ASTM A126)			
7	Head Discharge Flange Gasket	7	E LETTE	2)	·····
8	Discharge Flange Assembly Cap Screws	Steel (ASTM A126)			
9	Discharge Flange Assembly Nuts (Used with Key No. 8) (optional)	Low Carbon Steel (ASTM A307)			
_10	Head Discharge Flange Assembly Studs (optional)	Steel (C-1137)			
11	Head Discharge Flange Assembly Nuts (Used with Key No. 10) (optional)	Low Carbon Steel (ASTM A307)			<u> </u>
14	Head Packing Housing with Bearing (Includes Key No. 32)	Cast Iron (ASTM A48 CL.30)			
<u>}</u>	"O" Ring	Buna-N	•		
16	Head Packing Housing Caps Screws	Stainless Steel (300 Series)			
18	W/L Headhaft	Stainless Steel (AISI 316)			
18A	Topshaft	Steel (AISI 416)		, ,	
19	Headshaft Flinger	Neoprene			
20	Headshaft Adjusting Nut	Steel (C-1213)			
22	Packing (Set)	Composition JOHN CRANE (54	E LETTE	(R)	
23	Packing Follower	Bronze			
25	Head Packing Housing Grease Fittings	Steel			
26	Packing Follower Studs	Stainless Steel (AISI 416)			
27 -	Packing Follower Retainer Nuts	Stainless Steel (300 Series)			
28	Adapter Flange (Head Packing Housing or I/C Tension Nut)	Cast Iron (ASTM A48 CL.45)			
29	Adapter Flange O-Ring	Buna-N			
30	Adapter Flange Assembly Cap Screws	Stainless Steel (300 Series)			
32	W/L Headshaft Bearing	Bronze			
33	Headshaft Gib Key	Steel Plated			
34	Adjusting Nut Machine Screen	Steel			
67	Shaft Coupling	Steel (C-1137)	C-1137	C-1137	17-4PH
69	O/C Coupling	Steel (C-1137)			
76	W/L O/C Section	Black Steel (ASTM A120-57T Grade B)		-	
	W/L O/C Section	Black Sleel (ASTM A120-57T Grade B)			
- 1	_ ·	Brass	Bronze	N/A	Bronze
79	W/L L/S Bearing	Rubber	Bronze	N/A	Bronze



WATER LUBRICATED TURBINE PUMP MATERIALS OF CONSTRUCTION (STANDARD AND SPECIAL)

KEY NO.		STANDARD CONSTRUCTION		SPECIAL BOWL CONSTRUCTION			
	DESCRIPTION	STANDARD MATERIAL	CAST IRON BOWLS AND IMPELLERS	ALL IRON CONSTRUCTION	BRONZE BOWLS AND		
80	W/I L/S Sleeve	Stainless Steel (300 Series)	THE SELECTION		IMPELLERS		
81	W/L L/S Extension (3' 9-7/8" long)	Steel (C-1045)	-		 		
82	W/L L/S Section (5' 0" long)	Steel (C-1045)		<u> </u>	 		
83	W/L US Section (10' 0" long)	Steel (C-1045)	- 	<u> </u>			
84	W/L Bowl Shaft	Stainless Steel (AISI 416)	AIOL MO		<u> </u>		
90	W/L Discharge Case	Cast Iron (ASTM AIDI 416)	AISI 416	AISI 416	AISI 416		
93	W/L Discharge Case Bearing	Bronze	Cast Iron	Cast Iron	Bronze		
103	Bowl Assembly (Close Type-includes Key No. 104)	Cast Iron (ASTM A48 CL 30)	Bronze	Stainless Steel	Bronze		
104	Bowl Bearing	Bronze	Cast Iron	Cast Iron	Bronze		
105	Bowl Assembly (Semi-Open Type-Includes Key No. 104)	T	Bronze	Composition	Bronze		
106	Impeller (Closed Type)	Cast Iron (ASTM A48 CL 30)	N/A	N/A	N/A		
107	Impeller (Semi-Open Type)	Bronze	Cast Iron	Cast Iron	Cast Iron		
108	Taper Lock	Bronze	N/A?	N/A_	Bronze		
109	Suction Case Assembly (Closed Type-Includes Key No. 110)	Steel (416 SS)	C-1215	C-1215	AISI 416		
	Suction Base Bearing	Cast Iron (ASTM A48 CL 30)	Cast Iron	Cast Iron	Bronze		
		Bronze	Bronze	Composition	Bronze		
113	Suction Case Assembly (Semi-Open-Includes Key No. 110)	Cast Iron (ASTM A48 CL.30)	N/A	N/A/	Bronze		
	Suction Case End Plug	Galvanized Steel	Galvanized Steel	Galvanized Steel	Bronze		
- 1	Suction Case Sand Cap	Poly/Rubber	Poly/Rubber	Stainless Steel	Bronze		
	Sand Cap Set Screws (for Key No 114)	Stainless Steel		S. S	BIOIIZE		
-+	Bowl Assembly Cap Screws	Stainless Steel (300 Series) or Cadmium Plated Steel	Steel	Cadmium Plated Steel	Stainless Steel		
19	Suction Bell (Optional)	Cast Iron (ASTM (A48 CL.30)	Cast Iron		(300 Series)		
52	W/L O/C Assembly T&C (Norn. 5' long) (Assembly of Key No. 69 and 76)	Black Steel (ASTM A120-57T	Jast IIIII	Cast Iron	Bronze		
53	W/L O/C Assembly T&C (Nom. 10' long) (Assembly of Key No. 69 and 77)	Grade B) Black Steel (ASTM A120-57T Grade B)		Steel Cast Iron			

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PRODUCTION WELL EAST #9

PRODUCTION WELL SOD FARM #4

DNR 7802.94 TYPE OR USE PEN SELF TRANSCRIBING PRESS HARD

WELL LOG AND DRILLING REPORT
Ohio Department of Natural Resources
Divison of Water, 1939 Fountain Square Drive
Columbus, Ohio 43224 Phone (614) 265-6739 798067

PRESS HARD	Columbus, C	Ohio 4322	24 Phone (614) 265-6739 Permit Number
COUNTYWarren	TOWNSH	iIPU	section/Lot No1
OWNER/BUILDER Warren County Water & Sewer (Circle One or Both) First Last	PROPER	TY ADDR	
LOCATION OF PROPERTY East Side of SR 48 -			
LOCATION OF PROPERTY LESS SIDE OF SK 40			
CASING *(Length below grade) Borehole Diameter31	in.	SINUC	TION DETAILS GROUT
① Diameter 16 in. Length* 51 ft. Wall	Thickness •		Material 9 Bag Grout Mix Volume used 8 Yards
	I nickness	(n.	Method of installation 1 remie Depth: placed from 0 ft. to 26 ft.
Type: Steel Galy PVC	ther		GRAVEL PACK (Filter Pack)
			Material # 5 Parry Silica Volume used 40 Ton
Joints: inteaded weided Solvent	ther		Method of installation Tremie
	Thickness	in.	Depth: placed from 28 ft. to 102 ft.
SCREEN Type (wire wrapped, louvered, etc.)Wire Wrapped Mat)	Pitless Device X Adapter □ Preassembled unit Use of Well Public Water Supply
Length 50 ft. Diameter 10.1	^		☐ Rotary ☐ Cable ☐ Augered ☐ Driven ☐ Dug ※ Other Bucket
Set between 51 ft. and 101 ft. WELL LOG*	Slot	40	Date of Completion
INDICATE DEPTH(S) AT WHICH WATER IS ENCOUNTE	RED.		□ Bailing □ Other □ Other
Show color, texture, hardness, and formation:			Test rate 1100 gom Duration of test 24 bre
sandstone, shale, limestone, gravel, clay, sand, etc.	From	То	Drawdown 15' 5'' gpm Buration of test 2: ft.
Top Soil	0	5'	Measured from: ☐ top of casing K ground level ☐ Other ft. Date:
Dry Brown Sand & Gravel	5'	12'	Static Level (depth to water) 15 8" ft. Date:
Wet Brown Sand & Gravel w/ Big Rocks	12*	30'	
Brown Sand & Gravel	301	45'	*(Attach a copy of the pumping test record, per section 1521.05, ORC) PUMP
Brown Sand & Gravel w/ Big Rocks	45'	60¹	Type of pump Submersible Capacity 900 gpm
Fine Brown Sand	60'	1021	Pump set at To Be Determined ft. Pump installed by Reynolds, Inc.
Gray Clay	102'		WELL LOCATION
	102		Location of well in State Plane coordinates, if available:
White			Zone y
			Elevation of wellft./m. Datum plain: □NAD27 □NAD83
			Source of coordinates: GPS Survey Other
			Sketch a map showing distance well lies from numbered state highways, street intersections, county roads, buildings or other notable landmarks.
			North
			Well #4 - Sod Farm TURTLE CREEK
			SR > PW4
			W 48
			W 48 E as
			1
			PW3 PW2 PWI
	*		
			PW3 PW2 PWI LITTLE MIAM, RIVER
1-1/1-17-17-17-17-17-17-17-17-17-17-17-17-17			South
(If additional space is needed to complete well log, use next cons	secutively numb	ered form.)	I hereby certify the information given is accurate and correct to the best of my knowledge.
Orilling Firm Reverse 1865 SOC30			Signed E.S. Schlaark
		_	•
Address 645 Saurantawit Road 620			Date 1/6/95
city, State, Zip Middletown, Ohio 45042			
		1501 OF (ODH Registration Number

PUMP COMPANY

ROBERT MURRAY

""ARREN COUNTY WTP WELL FIELD:

DATE: 1-28-02

(SOD FARM NO. (4) X 67' OAL)

DESIGN: 900 GPM WATER LUBE:

E:

283' TDH

83.0% EFF. 77.5 BHP

1770 RPM

1) Bowl Assy,:

J-Line 12LC-6 stage, 11.25" od, C836 brz. enclosed impellers, C836 brgs.,

1,466#

1,466#

C836 brz. bowl wear rings, 416ss bowl shaft,

1) Disc. Hd.:

J-Line TR8C Discharge Head, 8" flg. 125/150# disc. x 16.5" mrt. bd. x 8" thrd intake x 21" round base, class 30 cast iron construction,

416ss collets, 304ss bolts, class 30 cast iron enameled lined bowls.

1) Base Plates:

Steel Fabr. Base Plate, 1" x 24" x 24"

1) Mtr. Hdsft:

416ss x 1-3/16"

1) Col. Assy.

(8" x 1-3/16" x as required per above)

Schd. 40 black steel, (.322 wall) Threaded x Coupled, 416ss couplings.

304ss sleeves, C836 brz. dropin spider x rubber brgs., C1045 steel lineshaft,

Top 5', 10' middles, 5' bottom

1) Parts:

(4) set of pkg. for each pump

1) Samples:

Sample of impeller material furnished with spec.

1) Motors:

US Motors, 100 hp, 460/3, 1770 rpm, prem. eff., nrr, type RUSI, 95.4%,

Frame 404TP, 16.5" bd., wpi, 6700# thrust brg., wt. 1110# Short Commercial Test, Thermostats, 120v. space heater.

Test Characteristics of Routine Typical Motor Test of typical motors furnished.

1) TESTS:

Factory Non Witness Test or if required Witness Test on each pump.

1) TEST:

Lateral & Torsional Critical Speed Analysis at factory by computer.

1) COATING:

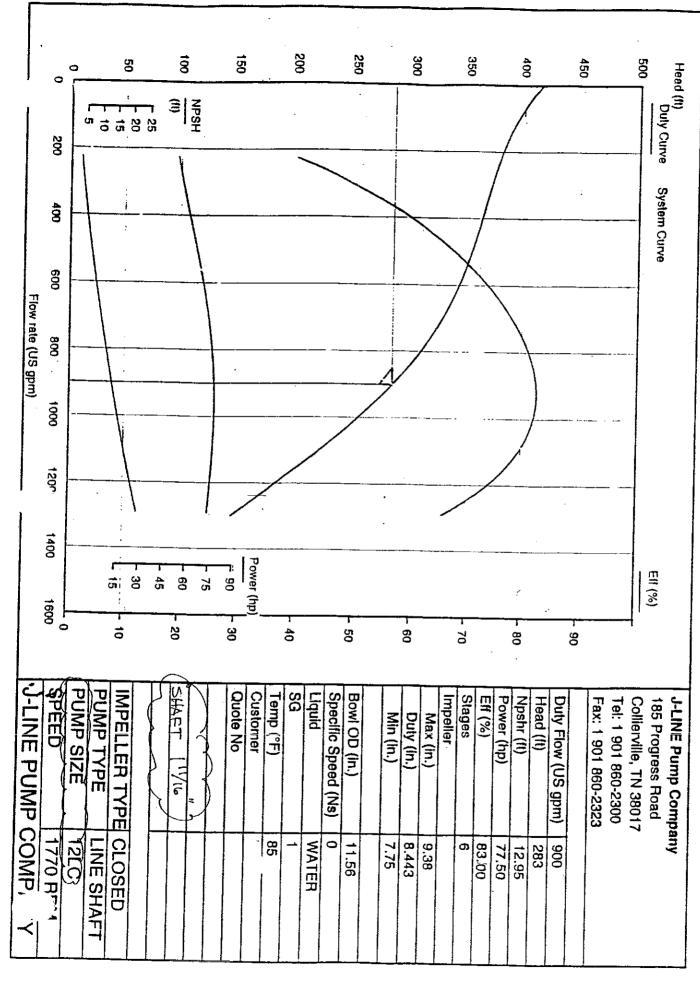
3.5 to 4.5 mils epoxy Tnemec 66-1211 Potapox Primer Inside & out on pipe,

Outside of bowls, Inside of Discharge Heads.

Delivery in about 12 to 14 weeks.

Sincerely,

Robert Murray 800-888-7167



WARREN COUNTY WTP WELL FIELD (SOD FARM NO. (4) X 67' OAL)



WATER LUBRICATED TURBINE PUMP MATERIALS OF CONSTRUCTION (STANDARD AND SPECIAL)

	WATER LUBRICATED	STANDARD CONSTRUCTION	SPEC	AL BOWL CONSTRU	ICTION
KEY NO.	DESCRIPTION	STANDARD MATERIAL	CAST IRON BOWLS AND IMPELLERS	ALL IRON CONSTRUCTION	BRONZE BOWLS AND IMPELLERS
1	Discharge Head	Cast Iron (ASTM A48 CL.30)			
2	Head Column Flange	Cast Iron (ASTM A48 CL30)			
3	Head Column Flange Gasket	Composition DUBBER SEE	LETTE	3	
4	Studs (Head Column Flange Assembly) (optional)	Steel (C-1137)			
5	Nuts (Used with Key No. 4 Head Column Flange Assembly) (optional)	Low Carbon Steel (ASTM A307)			
6	Head Discharge Flange	Cast Iron (ASTM A126)			
7	Head Discharge Flange Gasket	Composition RUBBER SE	E LETT	ER)	
8	Discharge Flange Assembly Cap Screws	Steel (ASTM A126)			
9	Discharge Flange Assembly Nuts (Used with Key No. 8) (optional)	Low Carbon Steel (ASTM A307)			
10	Head Discharge Flange Assembly Studs (optional)	Steel (C-1137)			· · · · · ·
11	Head Discharge Flange Assembly Nuts (Used with Key No. 10) (optional)	Low Carbon Steel (ASTM A307)			
14	Head Packing Housing with Bearing (Includes Key No. 32)	Cast Iron (ASTM A48 CL.30)			
	"O" Ring	Buna-N			
16	Head Packing Housing Caps Screws	Stainless Steel (300 Series)			
18	W/L Headhaft	Stainless Steel (AISI 316)			
18A	Topshaft	Steel (AISI 416)			
19	Headshaft Flinger	Neoprene			
20	Headshaft Adjusting Nut	Steel (C-1213)	~	>	- · · · - · ·
22	Packing (Set)	Composition JOHN CRAME (35	E LET	TER)	
23	Packing Follower	Bronze			
25	Head Packing Housing Grease Fittings	Steel			
26	Packing Follower Studs	Stainless Steel (AISI 416)			
27 €	Packing Follower Retainer Nuts Adapter Flange (Head Packing Housing or VC	Stainless Steel (300 Series)			
28	Tension Nut)	Cast Iron (ASTM A48 CL.45)	-		
29	Adapter Flange O-Ring	Buna-N	,		
30	Adapter Flange Assembly Cap Screws	Stainless Steel (300 Series)			
32	W/L Headshaft Bearing	Bronze			
33	Headshaft Gib Key	Steel Plated			
34	Adjusting Nut Machine Screen	Steel			
67	Shaft Coupling	Steel (C-1137)	C-1137	C-1137	17-4PH
69	O/C Coupling	Steel (C-1137) Black Steel (ASTM A120-57T Grade			
	W/L O/C Section	B) Black Steel (ASTM A120-57T Grade			
11	W/L O/C Section	B)			,
7.8	W/L L/S Bearing Spider	Brass	Bronze	N/A	Bronze
79	W/L L/S Bearing	Rubber	Bronze	N/A	Bronze



WATER LUBRICATED TURBINE PUMP MATERIALS OF CONSTRUCTION (STANDARD AND SPECIAL)

	WATER LUBRICATED	STANDARD CONSTRUCTION	SPE	CIAL BOWL CONSTR	RUCTION
KEY NO.	DESCRIPTION	STANDARD MATERIAL	CAST IRON BOWLS AND IMPELLERS	ALL IRON CONSTRUCTION	BRONZE BOWLS AND IMPELLERS
80	W/I L/S Sleeve	Stainless Steel (300 Series)			
81	W/L L/S Extension (3' 9-7/8" long)	Steel (C-1045)			
82	W/L L/S Section (5' 0" long)	Steel (C-1045)			
83	W/L L/S Section (10' 0" long)	Steel (C-1045)			
84	W/L Bowl Shaft	Stainless Steel (AISI 416)	AISI 416	AISI 416	AISI 416
90	W/L Discharge Case	Cast Iron (ASTM AIDI 416)	Cast Iron	Cast Iron	Bronze
93	W/L Discharge Case Bearing	Bronze	Bronze	Stainless Steel	Bronze
103	Bowl Assembly (Close Type-includes Key No. 104)	Cast Iron (ASTM A48 CL_30)	Cast Iron	Cast Iron	Bronze
104	Bowl Bearing	Bronze	Bronze	Composition	Bronze
105	Bowf Assembly (Semi-Open Type-Includes Key No. 104)	Cast Iron (ASTM A48 CL.30)	N/A	N/A	NA
106	impeller (Closed Type)	Bronze	Cast Iron	Cast Iron	Cast Iron
107	Impeller (Semi-Open Type)	Bronze	N/A?	N/A	Bronze
108	Taper Lock	Steel (416 SS)	C-1215	C-1215	AISI 416
100	Suction Case Assembly (Closed Type-includes Key No. 110)	Cast Iron (ASTM A48 CL.30)	Cast Iron	Cast Iron	Bronze
	Suction Base Bearing	Bronze	Bronze	Composition	Bronze
111	Suction Case Assembly (Semi-Open-Includes Key No. 110)	Cast Iron (ASTM A48 CL.30)	N/A	N/A/	Bronze
113	Suction Case End Plug	Galvanized Steel	Galvanized Steel	Galvanized Steel	Bronze
114	Suction Case Sand Cap	Poly/Rubber	Poly/Rubber	Stainless Steel	Bronze
115	Sand Cap Set Screws (for Key No 114)	Stainless Steel			
117	Bowl Assembly Cap Screws	Stainless Steel (300 Series) or Cadmium Plated Steel	Steel	Cadmium Plated Steel	Stainless Steel (300 Series)
119	Suction Bell (Optional)	Cast Iron (ASTM (A48 CL 30)	Cast Iron	Cast Iron	Bronze
152	W/L O/C Assembly T&C (Nom. 5' long) (Assembly of Key No. 69 and 76)	Black Steel (ASTM A120-57T Grade B)		Steel	
153	W/L O/C Assembly T&C (Nom. 10' long) (Assembly of Key No. 69 and 77)	Black Steel (ASTM A120-57T Grade B)		Cast Iron	

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PRODUCTION WELL SOD FARM #5

DNR 7802.05e

WELL LOG AND DRILLING REPORT
Ohio Department of Natural Resources
Division of Water, 2045 Morse Road, Columbus, Ohio 43229-6605
Voice (614) 265-6740 Fax (614) 265-6767

Well Log Number

2004138

Page 1 of 1 for this record.

WELL LOCATION	CONSTRUCTION DETAILS				
	Drilling Method: AIR ROTARY				
County WARREN Township UNION	BOREHOLE/CASING (Measured from ground surface)				
Township Time to					
WARREN CO.	Borehole Diameter <u>24</u> inches Depth <u>91</u> ft Casing Diameter <u>16</u> in. Length <u>62.5</u> ft.Thickness <u>0.375</u> in.				
Owner/Builder	Borehole Diameterinches Depth ft				
ST RT 48	Casing Diameterin. Lengthft.Thicknessin.				
Address of Well Location	Casing Height Above Groundftft				
City SOUTH LEBANON Zip Code +4 45036	Type { 1: Steel				
Permit No Section; and or Lot No	Wolded				
Use of Well_MUNICIPAL	Joints { 1: Welded 2:				
Coordinates of Well (Use only one of the below coordinate systems)	⁽² :				
State Plane Coordinates	SCREEN				
N	Diameter 16 in. Slot Size 0.08 in. Screen Length 30 ft.				
	Type CONTINOUS WIRE WOUND Material STAINLESS STEEL				
Latitude, Longitude Coordinates	Set Between61ft. andft				
Latitude: 39.37134 Longitude: 84.22492	GRAVEL PACK (Filter Pack) Material/ Global # 3 Used Used 7,000 #				
Elevation of Well in feet:620.7 +/0 ft.	Material/ Global # 3				
Datum Plane: NAD27 NAD83 Elevation Source TERRESTRIAL	Method of Installation Poured (gravity)				
Source of Coordinates: GPS	Depth: Placed From:ft. To:ft				
Well location written description:	GROUT VOIANA				
PWS-5	GROUT Vol/Wt. Material Neat cement Used 7,100 #				
	Method of Installation Pumped w/Tremie pipe				
	Depth: Placed From: 0 ft. To: 51 ft				
	DRILLING LOG*				
Comments on water quality/quantity and well construction:	FORMATIONS INCLUDE DEPTH(S) AT WHICH WATER IS ENCOUNTERED.				
	Color Texture Formation From To				
	BROWN DRY CLAY 0 3				
	BROWN FINE TO COURSE SAND AND GRAVEL 3 27				
	 				
	BROWN MEDIUM SAND 27 39				
	GRAY DENSE CLAY 39 40				
	GRAY FINE TO COURSE SAND 40 59				
	GRAY FINE TO COURSE SAND AND GRAVEL 59 68				
	GRAY FINE TO COURSE SAND 68 89				
	GRAY FINE TO COURSE SAND AND GRAVEL 89 91				
WELL TEST *	18(-1				
Pre-Pumping Static Level <u>14.5</u> ft. Date	Water Encountered At 3 91				
Measured from TOP OF CASING					
Pumping test method					
Test Rate gpm Duration of Testhrs.					
Feet of Drawdownft. Sustainable Yieldgpm					
*(Attach a copy of the pumping test record, per section 1521.05, ORC)					
Is Copy Attached? Yes No Flowing Well? Yes No					
, sep, (
PUMP/PITLESS	<u> </u>				
Type of pumpgpm					
Pump set_atft. Pitless Type					
Pump installed by					
I hereby certify the information given is accurate and correct to the best of my knowledge.					
Drilling Firm KELLEY CONTRACT DEWATERING					
-					
Address 5175 SW CLAY AVE					
City, State, Zip WYOMING MI 49548					
Signed CLIFFORD GRIEVES Date 7/27/2006	A wife Time (F				
(Filed Electronically)	Aquifer Type (Formation producing the most water.) SAND AND GRAVEL				
ODH Registration Number <u>02571</u>	Date of Well Completion 3/14/2006 Total Depth of Well 91 ft				

Customer: Danis Industrial Construction Co.

3233 Newmark Drive Miamisburg, Ohio

45342

Corporate Equipment Company

607 Redna Terrace, No. 100 Cincinnati, Ohio 45215

Lou Salvina

Phone 513 771 6696 ext. 116 Fax 513 771 0334

Contact:

Mr. Steve Brown

Project : Quote No. : Warren County Deerfield Hamilton Well Field

Phone:

937 228 1225

Fax: 937 228 7443

US-3245-242 Page No: 2 Date:

Tuesday, April 24, 2007

Item:

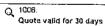
PWS-5

Model: Peerless Vertical - 12MB

Flow (US gpm)	Head (ft)	Eff. (%)	Power (hp)	Speed (RPM)
818	298	81 7	77 21	1770
Liquid	Temp. (°F)	Sp. Gravity	Visc. (cSt)	Dia. (inch)
Water	68	1 000	1 007	8 45

Summary Quotation:

Item No	Description	Weight (lb)	Qty
1	12MB, 6 Stage Bowl Assembly, Material Group A . Threaded Column 8/1.5, L4, Suction Bell. Threaded Discharge Bowl, OLS	0	1
2	Impeller, trimmed, surface finish Ra75, vane exit Std. Fig. 1-0.188	0	6
3	Adapter: Bottom Column	O	1
4	Top Bowl	106	1
5	Bowl, Intermediate	530	5
6	Collar, Sand, lower and upper	0	2
7	Bushing, Taper Lock (Collet) - Material 316ss	0	6
8	Fastener, Bowl, Material 316ss	0	72
9	Gasket, Bowl	0	5
10	Dynamic Balanced Impeller	0	6
11	Charge for Polishing (Premium Efficiency)	0	6
12	Ring, Seal, Lateral	0	6
13	Ring, Wear, Bowl, Material 63 Bronze	0	6
14	Suction	226	1
15	Plug, Pipe (Suction)	0	1
16	Shaft, Pump, D = 1.50 inch, L = 75.2 inch, T.Lock, Material 416ss	0	1
17	Coupling, Threaded, Shaft, Steel, 1215 CD	1,53	1
18	Strainer, Basket, Material 316Lss	16.98	1
19	OLS Threaded column 8.0 inch / 1.50 inch shaft / 10ft bearing spacing, length base to bowl 936 inch	0	1
20	Pipe, column threaded T&C 8.0 inch, bottom, length 120 inch, Material plain steel	282.21	1



Peerless Pump Company - RAPID v8.25.1 - 13th February 2007.



Customer: Danis Industrial Construction Co.

3233 Newmark Drive Miamisburg, Ohio

45342

Corporate Equipment Company

607 Redna Terrace. No. 100 Cincinnati, Ohio 45215 Lou Salvina

Phone 513 771 8696 ext. 116

Fax 513 771 0334

Contact :

Mr. Steve Brown

Project:

Warren County Deerfield Hamilton Well Field

Phone:

937 228 1225

Fax: 937 228 7443

Quote No. :	US-3245-242	Page No: 3	Date: Tuesday April 2	4 2007			
21	Pipe, column thread	ed T&C 8.0 inch, intermediate	1 length 120 inch, Material plain steel	1693 26	6		
22	Pipe, column threads	ed T&C 8.0 inch, intermediate	2. length 60 inch. Material plain steet	141 11	1		
23	Pipe, column threade	ed TBE 8.9 inch, top, code leng	of the base 36 inch. Material plain steel	84 86	1		
24	No Shaft critical spee	ed analysis		C	1		
25	Shaft-Group of Column			0	1		
26	Shaft, line, bottom, th	hreaded D = 1.50 inch length	120 inch, Material 416ss	59 38	1		
27	Shaft, line, intermedi-	ate 1, threaded D = 1.50 inch	length 120 inch, Material 416ss	356.28	5		
28	Shaft, line, intermedia	ate 2, threaded . D = 1.50 inch	, length 60 inch, Material 416ss	29 69	1		
29	Shaft, line, top, threa	Shaft, line, top, threaded . <2-Piece-Top-Shaft>, D=1 50 inch, L=51 00 inch, Material 416ss					
30	Bearing, Open Line S	Shaft		0	8		
31	Retainer, Bearing, Op	pen Line Shaft		45.44	8		
32	Coupling, Threaded,	12.24	8				
33	Shaft, Head (Top shaft for	0	1				
34	Coupling, Shaft, Line	, Top, Standard, Material Stee	, 1215 CD	1.53	1		
35	Shaft, Head, VHS mo	otor, D=1.50 inch, L=48 50 inc	n, Mat. 416ss	24	1		
36	Shaft, Line, Diameter 1.50	inch, Material 416ss		0	1		
37	Stuffing Box, Register 5.56	62, Assembly		0	1		
38	Stuffing box			0	1		
39	Gland, Stuffing box, f	Material 318ss		٥	1		
40	T-Bolt, Gland, Materia	al 316ss		0	2		
41	Nut, Gland			0	2		
42	Clamp, Gland			0	2		
43	Washer, Packing			0	1		
44	Packing			0	6		
45	Gasket, Stuffing 8ox			0	1		
46	Ring, Seal			0	1		
47	Fastener, Stuffing Bo	x		0	4		
48	Fitting grease			O	1		
49	Discharge head assembly	8x8x16.5FA, steel		o	1		





Customer: Danis Industriai Construction Co.

3233 Newmark Drive Miamisburg Ohio

45342

Corporate Equipment Company

607 Redna Terrace, No. 100 Cincinnati, Ohio 45215

Lou Salvina

Phone 513 771 6696 ext. 116

Fax 513 771 0334

Contact: Mr Steve Brown

Project : Quote No. :	Warren County Deerfield Hamilton Well Field Phone: 937 228 1225 Fa US-3245-242 Page No: 4 Date: Tuesday, April 24 2007	9x : 937 228 7443	
50	Pump operates at Constant Speed	0	1
51	Head, Discharge 3x8x16 5FA, Motor Base Diameter 8D=20 inch	413	1
52	Discharge Flange 150 ib	30	1
53	Name Plate, Pump Data	0	1
54	Name Plate, pp Data Screws	0	4
55	Name Plate, Rotation Direction	0	1
56	Name Plate, Warning	O	1
57	Wedge, Leveling	0	4
58	Plug 1, Discharge Head	0	5
59	Plug 2, Discharge Head	0	1
60	Guard 1, Coupling	0	1
61	Guard 2, Coupling	0	1
62	Screw, Guard	0	8
63	Washer, Guard	0	8
64	Flange, Top	0	1
65	Stud, Flange, Top, Material 304ss, Standard	0	8
66	Nut, Flange, Top, Material 304ss, Standard	0	8
67	Gasket, Flange, Top	0	1
68	Nut, Toρ	0	1
69	Screw, Nut, Top	0	2
70	Bolt, Motor	0	4
71	Motor-electric, 100hp-1783rpm, 575/460/230/200V, 3Ph, 60Hz, Frame 405TP, VHS, Encl. TEFC, Eff. premium, Modified, TUS, USEM	1350	1
72	Winding thermal protection Thermostats (without control module)	0	1
73	inverter duty	0	1
74	Service Factor 1.15	0	1
75	Ground lug in conduit box (non - explosion proof)	0	1
76	Non reverse ratchet	0	1
77	Starting Method at Voltage 460V: Full Voltage (standard)	0	1
78	Space heater, voltage 115V	0	1

Q 1006. Quote valid for 30 days

Peerless Pump Company - RAPID v3.25.1 - 13th February 2007.

Customer: Danis Industrial Construction Co.

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Contact:

Mr. Steve Brown

Project:

Warren County Deerfield Hamilton Well Field

Phone:

937 228 1225

Fax: 937 228 7443

Quote No. :	US-3245-242	Page No: 5	Date :	Tuesday, April 24, 2007		
79	Testing: Standard C	ommercial Test			0	1
80	Freight of electric mo included	otor from motor vendor to the	1st domestic destina	tion (North America)	0	. 1
81	Dimensions of conne	ection. Line Shaft Diameter= 1	50 inch. Motor Basi	e Diameter BD=20 inch	0	1
82	Plate, Sole, Material steel	056			157	1
83	Bolt, Base / Sole Pla	ite			0	4
84	Painting - Coating				0	1
85	Painting of discharge	head, PEERLESS blue, enai	meled		0	1
86	Surface of column: a black as received	issembled pump - painted PEI	ERLESS blue, enam	ieled; unassembled pump -	0	1
87	Painting of bowl, PE	ERLESS blue, enameled			0	1
88	Laboratory Performance T	Test, non-witnessed (increases	lead time of bowl as	ssembly by 1 week!)	0	1
89	Tolerance Type: Hyd	i Inst-Peerless Std			0	1
90	Test Data Sheets				0	1
91	Curve Approval (cust	tomer approval prior shipping)			0	1
92	Test Units US				0	1
93	Hydrostatic Pressure Test	(details as selected)			0	1
94	Hydrostatic Pressure	Test of Bowls, non-witnessed	l (add 1 week lead ti	me to Bowls)	0	1
95	Shipping Condition: Pump	DISSASSEMBLED			0	1
96	Add for SS sand collars (L	.CS)			o	2
97	Add for drill and tap 1.5" di	ia. hole in base head (LCS)			0	1

Freight Payment: Allowed

Estimated Schedule (week[s]): 16 to 18 weeks after approval

Net Weight Total (lb):

5585.54



Total (\$):

Customer:

Danis Industrial Construction Co.

3233 Newmark Drive Miamisburg Ohio

45342

Corporate Equipment Company

607 Redna Terrace, No. 100 Cincinnati, Ohio 45215

Lou Salvina

Phone 513 771 5696 ext. 116

Fax 513 771 0334

Contact:

Mr. Steve Brown

Project :

Warren County Deerfield Hamilton Well Field

Phone:

937 228 1225

Fax: 937 223 7443

Trim Status

Trimmed P

Full

Fulf

Quote No.:

US-3245-242

Page No: 3

Date:

Tuesday, April 24, 2007

Stage No

1 - 6

Imp. Dia. (inch) D2-in x D2-out

8.88 x 8.88

8.45 x 8.45

Pump Model Nom. Speed Peerless Vertical - 12MB 6 Stages 1770 RPM, 60 Hz Electric

Market

Vertical Turbine Pump

impeller No.

2624332 / MC

Material Spec. Group. A - B: CIE; i: Brz = Standard

Item Your Ref

PWS-5

Fluid

Water

Temperature 68 Viscosity 1.007 cSt

Sp Gravity

1.000 (base temp 68 °F) Flow rate Q.

818 US gpm

Bowl Total Head.

298 ft

Bowl Efficiency

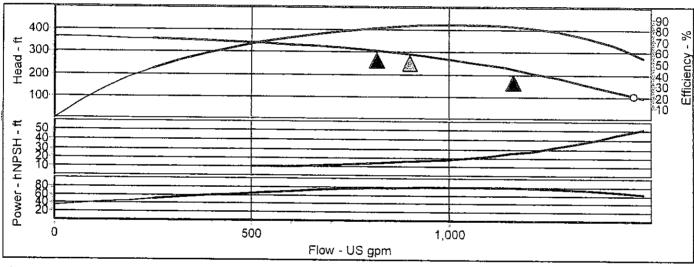
81.7 %

Bowl Power Required. NPSH Required

77.21 hp 14.163 ft

Performance curve according to Hyd Inst-Peerless Std

O Up-Thrust



Comments

Refer to factory for all single point bowl performance guarantees. Pumps must be selected with Hydraulic Institute-Peerless Std. See Std Hydraulic Performance document in RAPID for testing tolerances & contractual guarantees.

Flow (US gpm)	Head (ft)	Efficiency (%)	Power Required (hp)	NPSH Required (ft)	Thrust (lb)
0.0	368.3	0.0	34.3		5242.84
185.0	359.3	36.3	46.2		4945.20
370.0	349.9	57.1	57.3		4539.77
555.1	337.0	70.4	67.1	10.3	4148.13
740.1	317.0	79.2	74.8	12.8	3498.07
925.1	285.9	84.0	79.5	16.4	2571.21
1110.1	240.0	84.3	79.8	22.6	1629.90
1295.1	176.6	77.2	74.8	33.9	791.62
1480.2	94.5	55.8	63.5		-102.68





HYDRAULIC PERFORMANCE TOLERANCE

The conditions of service can only be guaranteed within the following tolerances, which are consistent with those standards as established by the Hydraulic Institute.

HEAD - Under 200 ft. at 2999 gpm and under	+8% - 0%
HEAD - Under 200 ft. at 3000 gpm and over	+5% - 0%
HEAD - 200 ft To 500 ft at any flow	+5% - 0%
HEAD - Over 500 ft. at any flow	+3% - 0%

Of

At Rated Head = 10% - 0% Capacity

Efficiency = -0% of Contracted Pump Efficiency
(Job factory guaranteed pump efficiency)

Bhp at Rated Condition = + 8% (As per above Head Tolerances) + 5% + 3%

This guarantee applies to only one set of conditions as specified. A second Head-Capacity point or Shut-Off Head cannot be guaranteed within these tolerances. When **Hydraulic Institute-Peerless Standard Tolerance Type** is selected in **Rapid** criteria screen the above tolerances are used in selecting pump at input head and capacity points.

A contractual guarantee of one point performance requires the factory application department's written approval prior to placing an order.

The plus 8%, 5% or 3% in HEAD tolerances at the rated capacity could result in a plus 8%, 5% or 3% greater horsepower load. Motors must be selected so that they can safely carry a load 8%, 5% or 3% greater than that calculated at the rated capacity. For specifications that specify that the motor size to be non - overloading over the entire pump curve, the 8%, 5% or 3% tolerance must be added to the expected horsepower at the low HEAD or maximum horsepower condition.

With the total HEAD tolerance described above, for centrifugal pumps, be sure and take into consideration, the plus 8%, 5% or 3% tolerance on the horsepower when selecting a pump from a standard sales manual curve.

A contractual guarantee of one point performance requires the factory application department's written approval prior to placing an order as directed by information in Sections 10 and 15.

Customer

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Lou Salvina

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Fax 513 771 0334

Contact:

Mr. Steve Brown

Project: Quote No.:

US-3245-242

Warren County Deerfield Hamilton Well Field

Page No: 7

Phone:

937 228 1225

Fax: 937 223 7443

Date:

Tuesday, April 24, 2007

Item:

PWS-5

Model: Peerless Vertical - 12MB

Flow (US gpm)	Head (ft)	Eff. (%)	Power (hp)	Speed (RPM)
818	298	81 7	77 21	1770
Liquid	Temp. (°F)	Sp. Gravity	Visc. (cSt)	Dia. (inch)
Water	68	- 1 000	1 007	8.45

Technical Information:

Technical Information 12MB

Material Code of Suction

Material Code of Case

Material Code of Intermediate Bowl

Material Code of Top Bowl

Material Code of Impeller

Maximum allowed pressure of bowl

Diameter of Pump (Bowl) Shaft in inches

Diameter of Line Shaft (Column) in inches

Pump as Submersible?

Is Enclosed Line Shaft (ELS) possible?

Is Flanged Column possible?

Is Threaded Column possible?

Hub Stick Down in inches

Lateral setting, best in inches

Lateral adjustment, standard in inches

Lateral adjustment, maximum in inches

Net Area of impeller inlet

Sphere Size

Stick up of pump shaft

Moment of Inertia of 1 Impeller WR^2

Moment of Inertia of rotor (all impellers + bowl shaft + line

shaft) WR^2

040 = Cast Iron, CL30 - ASTM A48, CLASS 30

XXX = Item not available in this configuration

041 = Cast Iron, CL30 ENAMELED - ASTM A48.

CLASS 30

041 = Cast Iron, CL30 ENAMELED - ASTM A48,

023 = BRONZE, ALUMINUM - ASTM B148

357 psi = 24 bar

1.5

1.5000

Not Applicable

Not Applicable

Not Applicable

Yes

0.12

0.1875

0.469

0.916

17.868 inch^2=11527.719 mm^2;

0.8125 inch = 20.637 mm

10.00 inch = 254.000 mm

188 lbs*inch^2 = 0.055 kg*m^2

1760.408 lbs*inch^2 = 0.515 kg*m^2



ADVERTISEMENT FOR BIDS

Sealed bids will be received by the Clerk of the County Commissioners, Warren County, Ohio, 406 Justice Drive, Lebanon, Ohio 45036, until November 7, 2019 @ 11:00 a.m., at the Office of the Warren County Commissioners, and then at said time bids will be opened and read aloud for the 2019 Well Redevelopment Project.

Bid documents and specifications are available online at the Warren County's Website at http://www.co.warren.oh.us/commissioners/Resources/Bids/Default.aspx. Questions regarding the technical specifications should be directed to Kathryn Gilbert at the Warren County Water and Sewer Department, (513) 695-1645. Each bid shall contain the full name of each person or company submitting the bid and be accompanied by a bid bond for the full amount of the bid or a certified check in the amount equal to ten (10) percent of the bid.

The project description: The project consists of the rehabilitation of four drinking water wells located at two well fields in Warren County. The work generally consists of pump removal, video inspection of the well screen and casing, chemical and mechanical redevelopment of the wells, step down and 24-hour pump testing, and plumbness/ alignment testing. The estimated contract value is \$275,000.00.

This notice is posted on the Warren County Government internet site. The Warren County Web Site can be accessed at http://www.co.warren.oh.us/commissioners/Resources/Bids/Default.aspx. To access bid project information, under the "Your Government" heading click on the "Board of Commissioners" tab, then click on the "Bid Projects" tab and choose the project you wish to obtain information about. Please contact the Warren County Commissioners Office at (513) 695-1250 if you have trouble with this procedure or if you need additional information on accessing bid project information on our web site. Please be aware that if you are downloading this document to bid this project, addendums to the scope may be issued prior to the bid date. In order to stay updated on any change, please email Kiana Hawk in the Commissioner's Office at Kiana.Hawk@co.warren.oh.us with your contact information.

The Board of Warren County Commissioners reserve the right to accept the lowest and best bid, to reject all bids, and to waive any irregularities in bids. By order of the Board of County Commissioners, Warren County, Ohio.

Tina Osborne, Clerk	

The Western Star:

Please publish the above advertisement one (1) time, the week of October 6, 2019 and send invoice to the Warren County Commissioners.