CITY OF SPRINGFIELD, OHIO

PROJECT MANUAL

SPRINGFIELD

EASTERN PRESSURE DISTRICT

WATERLINE UPGRADE

VOLUME I of II

BIDDING DOCUMENTS

BID SUBMITTAL

Date Issued: 11/30/2020

PREPARED BY:
BURGESS & NIPLE

Vui Chung, P.E.
STATE OF OHIO PROFESSIONAL ENGINEER

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BID SUBMITTAL

DESIGN PROFESSIONAL

Burgess & Niple, Inc.
5085 Reed Road
Columbus, Ohio, 43220

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ADVERTISEMENT FOR BIDS
BID NO. 20-33

City of Springfield
2100 Lagonda Avenue
Springfield, Ohio 45503

Separate sealed Bids for the construction of the **City of Springfield - Eastern Pressure District Waterline Upgrade** will be received by City of Springfield until 12:00 o'clock noon (local time), January 15, 2021, and then at said office publicly opened and read aloud.

City of Springfield
City Hall
76 E. High Street
Springfield, Ohio 45502

The work covered by the Contract Documents includes installation of waterlines, new booster pump station; building, and necessary mechanical, electrical, and instrumentation upgrades and appurtenances.

Copies of the Bidding Documents may be purchased at the City of Springfield, 2100 Lagonda Avenue Springfield, Ohio 45503 for $25.00. No fees for document purchase or shipping will be refunded by the City to any purchaser for any reason.

A mandatory prebid meeting will be held via web meeting platform. The Prebid meeting is scheduled for December 10, 2020 at 10 am. Bidders shall submit email contact information by 5 pm on December 7, 2020 to Vui.Chung@burgessniple.com to be provided a meeting link.

Each Proposal must contain the full name of the party or parties submitting the proposal and all persons interested therein. Each Bidder must submit evidence of its experiences on projects of similar size and complexity. The Owner requires that this project to be completed by July 15, 2022.

All Contractors and Subcontractors involved with the project will, to the extent practicable use Ohio Products, materials, services, and labor in the implementation of their project. Additionally, Contractor compliance with the equal employment opportunity requirements of Ohio Administrative Code Chapter 123, the Governor's Executive Order of 1972, and Governor's Executive Order 84-9 shall be required.

Construction of this project will be funded in part with funds made available from the Ohio Water Development Authority (OWDA). Bidder must comply with all applicable laws and regulation for construction project receiving from OWDA. This project will be subjected to State Prevailing Wage Rates.

The City anticipates a Notice to Award by February 16, 2021 and a Notice to Proceed by April 5, 2021.

Bidders should be aware and are herein advised that in the event of any inconsistency or conflict between the terms and provisions of the City's General Conditions or the project contract documents, the terms and provisions of the City's General Conditions shall control. A copy of the General Conditions can be obtained via the City's website at https://springfieldohio.gov/wp-content/uploads/2015/09/General-Provisions-2003.pdf

Prospective Bidders may make written inquiries to Juli Springer at jspringer@springfieldohio.gov. The City of Springfield reserves the right to reject any and all Bids or to increase or decrease or omit any item or items and/or award to the lowest and best Bidder. The City of Springfield reserves the right to waive any informalities or irregularities in the Bidding.

Brandy Bubp
Purchasing Specialist
76 E. High Street
Springfield, Ohio 45502
(937) 324-7333
bbubp@springfieldohio.gov

INSTRUCTIONS TO BIDDERS

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INSTRUCTIONS TO BIDDERS

DISCLAIMER - These instructions are not intended to relieve the bidder of the responsibility to provide required information. Rather, they are offered to serve as an aid in assisting in the preparation of the bid. Notice is hereby given that the failure to submit all required information included throughout the Contract Documents may result in the rejection of your bid on the basis that the bid is non-responsive.

1. DEFINED TERMS

Terms used in Instructions to BIDDERS are defined in the Standard General Conditions of the Construction Contract (EJCDC C700) (2013 Edition).

Certain additional terms used in these Instructions to BIDDERS have the meanings indicated below which are applicable to both the singular and plural thereof.

1.1. **Issuing Office** - the office from which the Bidding Documents are to be issued and where the bidding procedures are to be administered.

2. COPIES OF BIDDING DOCUMENTS

2.1. Complete sets of the Bidding Documents may be obtained at the location noted and for the sum stated in the Advertisement for Bids.

2.2. Complete sets of Bidding Documents must be used in preparing Bids; neither OWNER nor ENGINEER assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.

2.3. OWNER and ENGINEER in making copies of Bidding Documents available on the above terms do so only for the purpose of obtaining Bids for the Work and do not confer a license or grant for any other use.

3. QUALIFICATION OF BIDDERS

Each BIDDER must submit with their Bid, an experience record form (Section 00 45 13) with at least three projects listed that are similar to this project in size and scope. To further demonstrate qualifications to perform the Work, each BIDDER must be prepared to submit within 5 days after an OWNER's request for detailed written evidence such as financial data, previous experience, present commitments, subcontractor capabilities or experience, and other such data. Each Bid must contain evidence of BIDDER's qualification to do business in the state where the Project is located or covenant to obtain such qualification prior to award of the Contract. The CONTRACTOR's state license number must be included where applicable. Each BIDDER must be registered as a plan holder with the Issuing Office.

4. **EXAMINATION OF CONTRACT DOCUMENTS AND SITE**

4.1. It is the responsibility of each BIDDER before submitting a Bid:

4.1.1. To examine thoroughly the Contract Documents and other related data identified in the Bidding Documents (including appendices);

4.1.2. To visit the site to become familiar with and satisfy BIDDER as to the general, local, and site conditions that may affect cost, progress, performance, or furnishing of the Work;

4.1.3. To consider federal, state, and local Laws and Regulations that may affect cost, progress, performance, or furnishing of the Work;

4.1.4. To study and carefully correlate BIDDER's knowledge and observations with the Contract Documents and such other related data; and

4.1.5. To promptly notify ENGINEER of all conflicts, errors, ambiguities, or discrepancies which BIDDER has discovered in or between the Contract Documents and such other related documents and/or site conditions.

4.2. BIDDER may review, if available, those reports of explorations and tests of subsurface conditions at or contiguous to the site that have been utilized by the ENGINEER in preparation of the Contract Documents.

Copies of such reports and drawings will be made available by the OWNER to any BIDDER on request.

4.3. Provisions concerning responsibilities for the adequacy of data furnished to prospective BIDDERS with respect to subsurface conditions, other physical conditions and underground facilities, and possible changes in the Contract Documents due to differing or unanticipated conditions appear in paragraphs 3.03, and 3.04 of Section 00700, "General Conditions," and Section 00800, "Supplementary Conditions."

4.4. Before submitting a Bid, each BIDDER will be responsible to obtain such additional or supplementary examinations, investigations, explorations, tests, studies, and data concerning conditions (surface, subsurface, and underground facilities) at or contiguous to the site or otherwise, which may affect cost, progress, performance, or furnishing of the Work or which relate to any aspect of the means, methods, techniques, sequences, or procedures of construction to be employed by BIDDER and safety precautions and programs incident thereto or which BIDDER deems necessary to determine its Bid for performing and furnishing the Work in accordance with the time, price, and other terms and conditions of the Contract Documents.

4.5. On request, OWNER will provide each BIDDER access to the site to conduct such examinations, investigations, explorations, tests, and studies as each BIDDER deems necessary for submission of a Bid. BIDDER shall notify all underground utilities and must fill all holes and clean up and restore the site to its former conditions upon completion of such explorations, investigations, tests, and studies. The BIDDER assumes all liability from damages resulting from such examination, investigation, exploration, tests, and studies. The schedule for such investigations shall be approved by the OWNER.

4.6. Reference is made to Section 00800, "Supplementary Conditions," for the identification of the general nature of the Work that is to be performed at the site by the OWNER or others (such as utilities and other prime CONTRACTORS) that relates to the Work for which a Bid is to be submitted. On request, OWNER will provide to each BIDDER for examination access to or copies of Contract Documents (other than portions thereof related to price) for such Work.

4.7. The submission of a Bid will constitute an incontrovertible representation by the BIDDER that the BIDDER has complied with every requirement of this Article 4, that without exception the Bid is premised upon performing and furnishing the Work required by the Contract Documents and applying the specific means, methods, techniques, sequences or procedures of construction (if any) that may be shown or indicated or expressly required by the Contract Documents, the prevailing hourly wage rates for the area in which the Project is located, that BIDDER has given ENGINEER prompt written notice of all

conflicts, errors, ambiguities, and discrepancies that the BIDDER has discovered in the Contract Documents, and the written resolution thereof by ENGINEER is acceptable to BIDDER, and that the Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performing and furnishing the Work.

4.8. The provisions of 4.1 through 4.8, inclusive, do not apply to asbestos, polychlorinated biphenyls (PCBs), petroleum, hazardous waste, or radioactive material unless identified in the Contract Documents. If these materials are not identified by the Contract Documents, provisions for handling them shall be in accordance with paragraph 5.06 of Section 00700, "General Conditions."

5. INTERPRETATIONS AND ADDENDA

5.1. All questions about the meaning or intent of the Bidding and Contract Documents are to be directed to the ENGINEER in writing. Interpretations or clarifications considered necessary by the ENGINEER in response to such questions will be issued by Addenda mailed or delivered to all parties recorded by the ENGINEER as having received the Bidding Documents. Questions received less than 10 days prior to the date for opening of Bids may not be answered. Only questions answered by formal written Addenda will be binding. Oral and other interpretations or clarifications will be without legal effect.

5.2. Addenda may also be issued to modify the Bidding Documents as deemed advisable by the OWNER or the ENGINEER.

6. BID SECURITY

6.1. Each Bid must be accompanied by a Bid security made payable to the Owner in the form of either:

1. A Bond for the full amount of the BIDDER's maximum Bid price with a corporate Surety approved by the Owner and meeting the requirements of paragraphs 6.01.A and 6.01.B of the General Conditions. Use Bond form*s* included herein.

2. A certified check for 10 percent of the Bid.

3. A cashier's check for 10 percent of the Bid.

6.2. As soon as the Bids have been compared, the Owner will return the Bid securities of all except the three lowest BIDDERS. When the Agreement is executed, or the period for holding the Bids has expired and no time extension has been mutually agreed upon, the Bid guaranties of the two remaining unsuccessful BIDDERS will be returned.

6.3 Attorneys-in-fact who sign Bond forms must file with each Bond a certified and effective dated copy of their power of attorney.

6.4 The party to whom the Contract is awarded will be required to execute the Agreement and obtain the Contract Bond, if applicable, within 10 calendar days from the date of the Notice of Award. The Notice of Award shall be accompanied by the necessary Agreement and Bond forms. In case of failure of the BIDDER to execute the Agreement, the Owner may, at their option, consider the BIDDER in default, in which case the BIDDER will be subject to the liability as set forth in the Bid Guaranty and Contract Bonds or Contract Bonds.

7. **CONTRACT TIMES**

The number of days within which the Work is to be completed and ready for final payment (the term "Contract Times" is defined in paragraph 1.01.A.15 of Section 00700, "General Conditions") is set forth in the Proposal (or incorporated therein by reference to the attached Bid Form).

8. **LIQUIDATED DAMAGES**

Provisions for liquidated damages, if any, are set forth in the Agreement.

9. **SUBSTITUTE AND "OR EQUAL" ITEMS**

The Contract, if awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Specifications without consideration of possible substitute or "or equal" items. Whenever it is indicated in the Drawings or specified in the Specifications that a substitute or "or equal" item of material or equipment may be furnished or used by the CONTRACTOR if acceptable to the ENGINEER, application for such acceptance will not be considered by the ENGINEER until after the Effective Date of the Agreement. The procedure for submission of any such application by

CONTRACTOR and consideration by ENGINEER is set forth in paragraphs 7.05.A, B, C, D, E, and F of Section 00700, "General Conditions," and Section 00800, "Supplementary Conditions."

10. **SUBCONTRACTORS, SUPPLIERS, AND OTHERS**

BIDDERS shall submit the identity of any and all subcontractors, suppliers, or others who may be contracted by the CONTRACTOR during the course of the project on the Proposed Subcontractors form (Section 00 43 36).

11. **BID FORM**

11.1. The Bid Form is included with the Bidding Documents and the Bid prices must be entered therein, in figure only. In all items, Bids must be made separately on labor and material and the total price for each unit shall be the "Total (Sum of Labor and Material)." In the event of math errors on the Bid Schedule, the "Labor" and "Material" columns will be assumed to be correct and the remaining math will be corrected accordingly. Bids will then be evaluated using the corrected figures.

11.2. All blanks on the Bid Form must be completed by printing or typing on the original forms from the Issuing Office.

11.3. Bids by corporations must be executed in the corporate name by the president or a vice president (or other corporate officer accompanied by evidence of authority to sign) and the corporate seal must be affixed and attested by the secretary or an assistant secretary. The corporate address and state of incorporation must be shown below the signature.

11.4. Bids by partnerships must be executed in the partnership name and signed by a partner, whose title must appear under the signature and the official address of the partnership must be shown below the signature.

11.5. All names must be typed or printed below the signature.

11.6. The Bid shall contain an acknowledgement of receipt of all Addenda (the numbers of which must be filled in on the Bid Form).

11.7. The address, telephone number, and facsimile number for communications regarding the Bid must be shown.

11.8. Evidence of authority to conduct business as an out-of-state corporation in the state where the Work is to be performed shall be provided in accordance with paragraph 3, "Qualifications of BIDDERS." State CONTRACTOR license number, if any, must also be shown.

11.9. The BIDDER is required to execute and submit a Noncollusion Affidavit (Section 00 45 19) with the Bid.

11.10. The successful BIDDER will be further required to furnish the OWNER with a complete breakdown of the lump sum Bid items, to the satisfaction of the ENGINEER, before signing the Contract Documents. The lump sum breakdown shall be in sufficient detail to provide a check of claims for partial payment requests.

11.11. The quantities listed in the Bid are to be considered as approximate and are to be used only for the comparison of the Bids and as a basis for computing amounts of security or penal sums of Bonds to be furnished. The unit prices to be tendered by the BIDDERS are to be tendered expressly for the scheduled quantities and as they may be increased or decreased by duly authorized Change Order. Payments, except for lump sum Bids, and except for the lump sum items in unit price Bids, will be made to the CONTRACTOR for the actual quantities only of Work performed or materials furnished in accordance with the Contract Documents.

12. **SUBMISSION OF BIDS**

Bids shall be submitted at the time and place indicated in the Advertisement or Invitation to Bid and shall be enclosed in an opaque sealed envelope, marked with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted) and name and address of BIDDER and accompanied by the Bid security and other required documents. If the Bid is sent through the mail or other delivery system the sealed envelope shall be enclosed in a separate envelope with the notation "BID ENCLOSED" on the face of it.

The Bidding Forms are to be completed and submitted along with the Bid security.

13. MODIFICATION AND WITHDRAWAL OF BIDS

13.1. 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.

13.2. If within the time specified by law, any BIDDER files a duly signed, written notice with OWNER and promptly thereafter demonstrates to the reasonable satisfaction of the OWNER that there was a material and substantial mistake in the preparation of its Bid, that BIDDER may withdraw its Bid and the Bid security will be returned. Thereafter, that BIDDER will be disqualified from further bidding on the Work to be provided under the Contract Documents.

14. OPENING OF BIDS

Bids will be opened (unless obviously nonresponsive) and read aloud publicly. An abstract of the amounts of the base Bids and major alternates (if any) will be made available to BIDDERs after the opening of Bids.

15. BIDS TO REMAIN SUBJECT TO ACCEPTANCE

All Bids will remain subject to acceptance for 60 days after the day of the Bid opening, but OWNER may, in its sole discretion, release any Bid and return the Bid security prior to that date. Should there be any reasons why the Contract cannot be awarded within the specified period, the time may be extended in writing by mutual agreement between the OWNER and the BIDDER. If the Contract is to be awarded, OWNER will give successful BIDDER a Notice of Award within 60 days after the date of the Bid unless the time is extended by mutual agreement between the OWNER and the BIDDER.

16. AWARD OF CONTRACT

16.1. OWNER reserves the right to reject any or all Bids, including without limitation the rights to reject any or all nonconforming, nonresponsive, unbalanced, or conditional Bids and to reject the Bid of any BIDDER if OWNER believes that it would not be in the best interest of the Project to make an award to that BIDDER, whether because the Bid is not responsive or the BIDDER is unqualified or of doubtful financial ability or fails to meet any other pertinent standard or criteria established by OWNER. OWNER

also reserves the right to waive all informalities not involving price, time, or changes in the Work and to negotiate contract terms with the Successful BIDDER. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum. Discrepancies between words and figures will be resolved in favor of the words.

16.2. In evaluating Bids, OWNER will consider the qualifications of BIDDERS, whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.

16.3. OWNER may consider the qualifications and experience of Subcontractors, Suppliers, and other persons and organizations proposed for those portions of the Work as to which the identity of Subcontractors, Suppliers, and other persons and organizations must be submitted as provided in the Supplementary Conditions. OWNER may also consider the operating costs, maintenance requirements, performance data, and guarantees of major items of materials and equipment proposed for incorporation in the Work when such data is required to be submitted prior to the Notice of Award.

16.4. OWNER may conduct such investigations as OWNER deems necessary to assist in the evaluation of any Bid and to establish the responsibility, qualifications, and financial ability of BIDDERS, proposed Subcontractors, Suppliers, and other persons and organizations to perform and furnish the Work in accordance with the Contract Documents to OWNER's satisfaction within the prescribed time.

16.5. If the Contract is to be awarded, it will be awarded to lowest BIDDER whose evaluation by OWNER indicates to OWNER that the award will be in the best interests of the Project.

17. **CONTRACT SECURITY**

Paragraphs 6.01.A and B of Section 00700, "General Conditions," and Section 00800, "Supplementary Conditions," set forth OWNER's requirements as to performance and payment Bonds or Contract Bonds. When the Successful BIDDER delivers the executed Agreement to OWNER, it must be accompanied by the required performance and payment Bonds or Contract Bond.

18. **SIGNING OF AGREEMENT**

When OWNER gives a Notice of Award to the Successful BIDDER, it will be accompanied by the required number of unsigned counterparts of the Agreement. Within 10 days thereafter CONTRACTOR shall sign and deliver the required number of counterparts of the Agreement To OWNER with the required Bonds. Within 20 days thereafter OWNER shall deliver two fully signed counterparts to CONTRACTOR.

19. **PREBID CONFERENCE**

A Prebid conference is required by the OWNER.

20. **PROTEST PROCEDURE**

20.1 A protest based upon an alleged violation of the procurement requirements may be filed against the OWNER's procurement action by a party with an adversely affected direct financial interest. The protest shall be filed with the OWNER. The OWNER shall determine the validity of the protest. The OWNER may request additional information or a hearing in order to resolve the protest.

20.2 A protest shall be filed as early as possible during the procurement process, but must be received by the OWNER no later than 1 week after the basis of the protest is known or should have been known, whichever is earlier. If the protest is mailed, the protestor bears the risk of nondelivery within the required time period.

20.3 A protest must clearly present the procurement requirement being protested, the procurement regulation in alleged noncompliance, the facts which support the protest, and any other information necessary to support the protest.

PROPOSAL
THE CITY OF SPRINGFIELD
BID NO. 20-33

Proposal of _____ (hereinafter called "BIDDER"), organized and existing under the laws of the State of Ohio doing business as _____.* To the CITY of Springfield, Ohio.

In compliance with the Advertisement for Bids, and having carefully examined the Instructions to Bidders, the General Conditions and Supplemental General Conditions, if any, Drawings, Specifications, Special Notes and related Documents, as well as the site, and being familiar with all conditions affecting the Work, including the availability of labor and materials, the undersigned BIDDER hereby proposes to perform all work for:

Eastern Pressure District Waterline Upgrade

in accordance with the Contract Documents, within the time limits set forth therein, and at the prices stated hereinafter.

BIDDER hereby agrees to commence work after receipt of the executed contract from the CITY, but not later than a date to be specified in the Notice to Proceed and to fully complete the Project by **Substantial Completion Date:6/10/2022 Final Completion Date:7/15/2022** thereinafter.

BIDDER further agrees to pay as liquidated damages, the amounts set forth in Section 00800 of the Supplementary Conditions.

BY _____

TITLE _____

ADDRESS _____

DATE _____

EMPLOYER'S FEDERAL ID NO. _____

* Insert "a corporation", "a partnership", or "an individual" as applicable.

(Return completed with bid.)

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BID SCHEDULE
Bid No.: 20-33

REF. NO.	ITEM NO.	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	GRAND TOTAL
1	201	Clearing and Grubbing	1	LS		
2	201	Tree Removed - 18-inch Size	5	EACH		
3	201	Tree Removed - 30-inch Size	3	EACH		
4	201	Tree Removed - 48-inch Size	2	EACH		
5	202	Pipe Removed (Soil Backfill)	100	LF		
6	202	Pipe Removed (Granular Backfill)	100	LF		
7	254	Pavement Planning, Asphalt Concrete (3-inch)	557	SY		
8	261	Pavement Restoration, Type C-Mod, As Per Plan	80	SY		
9	261	Pavement Restoration, As Per Plan (Drive)(Residential)(Gravel)	4	SY		
10	261	Pavement Replacement, As Per Plan (Drive)(commercial)(Asphalt)	178	SY		
11	262	Bituminous Base Pulverizing and Shaping, As Per Plan	3425	SY		
12	301	Asphalt Concrete Base	100	CY		
13	304	Aggregate Base (includes excavation and disposal of excavated material)	130	CY		
14	407	Tack Coat	409	GAL		
15	410	Traffic Compacted Surface, Type A	74	CY		
16	441	Asphalt Concrete Surface Course, Type I (448), PG64-22	140	CY		
17	441	Asphalt Concrete Intermediate Course, Type I (448)	195	CY		
18	608	4" Concrete Walk	60	SF		

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REF. NO.	ITEM NO.	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	GRAND TOTAL
19	609	Combination Curb and Gutter, Type 'B', Radius	50	LF		
20	609	Item 609, Combination Curb and Gutter, Radius, As Per Plan (ODOT Type 9)	20	LF		
21	611	Precast Reinforced Concrete Outlet Reconstructions	2	EA		
22	614	Maintaining Traffic	1	LS		
23	614	Law Enforcement Officer With Patrol Car For Assistance	100	HOUR		
24	614	Work Zone Impact Attenuator (Unidirectional)	9	EACH		
25	614	Detour Signing	1	LS		
26	614	Barrier Reflector, Type 1	16	EACH		
27	614	Object Marker, One-Way	16	EACH		
28	616	Water	1	MGAL		
29	622	Portable Barrier, 32"	780	FT		
30	623	Construction Layout Stakes	1	LS		
31	632	Detector Loop, Powerhead	3	EACH		
32	653	Topsoil Furnished and Placed, As Per Plan	400	CY		
33	659	Seeding & Mulching, As Per Plan (Class 1)	6500	SY		
34	659	Seeding & Mulching, As Per Plan (Class 2)	13000	SY		
35	659	Seeding & Mulching, As Per Plan (Short Grass Wildflower Mix)	450	SY		
36	659	Commercial Fertilizer	5	Ton		
37	671	Erosion Control Mat, Type A	10000	SY		
38	803	12" Conduit, Type B (soil backfill)	442	LF		

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REF. NO.	ITEM NO.	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	GRAND TOTAL
39	803	12" Conduit, Type B (granular backfill)	167	LF		
40	803	15" Conduit, Type B (soil backfill)	5	LF		
41	803	12" Conduit, As Per Plan (Drive Pipes)	144	LF		
42	803	18" Conduit, As Per Plan (Drive Pipes)	42	LF		
43	804	Manhole, No. 1, Type B, As Per Plan	4	EACH		
44	804	Catch Basin, No. 2-2-B	2	EACH		
45	832	Erosion Control	60000	$	$1	$60,000.00
46	838	6" Water Main - Open Cut (soil backfill)	204	LF		
47	838	6" Water Main - Open Cut (granular backfill)	67	LF		
48	838	8" Water Main - Open Cut (soil backfill)	23	LF		
49	838	12" Water Main - Open Cut (soil backfill)	66	LF		
50	838	12" Water Main - Open Cut (granular backfill)	210	LF		
51	838	12" Water Main, As Per Plan (HDD)	3802	LF		
52	838	12" Water Main, As Per Plan (Bore & Jack)	42	LF		
53	838	16" Water Main - Open Cut (soil backfill)	68	LF		
54	838	24" Water Main - Open Cut (soil backfill)	7553	LF		
55	838	24" Water Main - Open Cut (granular backfill)	3458	LF		
56	838	24" Water Main, As Per Plan (HDD)	420	LF		
57	838	24" Water Main, As Per Plan (Bore & Jack)	194	LF		
58	839	6" Resilient Seat Wedge Valve and Valve Box	25	EA		

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REF. NO.	ITEM NO.	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	GRAND TOTAL
59	839	12" Resilient Seat Wedge Valve and Valve Box	5	EA		
60	839	12" x 12" Tapping Sleeve, Valve, and Valve Box	1	EA		
61	839	16" Butterfly Valve and Valve Box	1	EA		
62	839	24" Butterfly Valve and Valve Box	8	EA		
63	840	Fire Hydrant	24	EA		
64	840	Fire Hydrant Relocated	1	EA		
65	841	1" Property Service, Bored	1	EA		
66	841	3/4" Property Service with Meter Box, Bored	1	EA		
67	841	1" Property Service (Short Side)	12	EA		
68	841	1" Property Service, Bored (Long Side)	13	EA		
69	SPC	Manual Air Release Outlet	8	EA		
70	SPC	Increase or Decrease in Excavation (Granular Backfill)	20	CY		
71	SPC	Increase or Decrease in Excavation (Soil Backfill)	80	CY		
72	SPC	Buried Utility Warning Sign	4	EA		
73	SPC	12" Flared End Section	2	EA		
74	625	Conduit, Jacked or Drilled, 725.052, 2”	1250	LF		
75	625	Pull Box, 725.06, 24X36	3	EA		
76	804	Fiber Optic Cable 6 Fiber, Armored (Quantity shown is total distance)	1350	LF		
77	SPC	Booster Pump Station Booster Pumps	4	EA		

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REF. NO.	ITEM NO.	ITEM DESCRIPTION	EST. QUANTITY	UNIT	UNIT PRICE	GRAND TOTAL
78	SPC	Booster Pump Station Diesel Engine Generator Set	1	LS		
79	SPC	Variable Frequency Drives	4	EA		
80	1001	Premium for Owner's Protective Insurance	1	LS		
81	1002	Premium for Contract Performance and Payment Bond	1	LS		
82	SPC	Field Office	1	LS		
83	SPC	General Cash Allowance	1	LS	$75,000.00	$75,000.00
84	SPC	Owner's Contingency	1	LS	$100,000.00	$100,000.00
85	SPC	Eastern Pressure District Waterline Upgrade, Complete	1	LS		

TOTAL BID _____

BREAKDOWN OF LABOR AND MATERIALS
CONSIDERATION FOR MATERIALS:
(Materials incorporated into a structure or improvement
on and becoming a part of real property) _____

CONSIDERATION FOR LABOR AND OTHER OBLIGACTIONS:
(For other obligations of such construction contract) _____

TOTAL LABOR AND
MATERIALS: _____

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BID BOND

KNOW ALL MEN BY THESE PRESENTS : That we the undersigned, _____, as Principal, and _____ _____ whose address is _____ a Surety Company qualified to do business in the State of Ohio, as Surety, are hereby held and bound unto The City of Springfield, Ohio, a Municipal Corporation, as Obligee, in the sum of _____ dollars ($) for the payment of which we do well and truly and jointly and severally bind ourselves and our respective heirs, executors, administrators, successors and assigns.

DATED as of the _____day of _____20_____

The conditions of this obligation are such : THAT WHEREAS, the above bound principal has submitted, or on about the _____ day of _____, will submit, to the Obligee a bid for labor, materials, and/or equipment as more fully described in said bid, which bid is, by reference, incorporated in and made part of this instrument :

NOW THEREFORE: If said Principal shall upon award of Contract, either in whole or in part, enter into an appropriate contract with said Obligee conforming to Principal's bid and concurrently with the execution of said contract, give Performance and Payment Bond, in the amount required by said Obligee, for the full and faithful performance and keeping of all the provisions, terms, requirements, covenants and warranties of said contract and comply with the requirements of the Instructions to Bidders; then this obligation shall be void; OTHERWISE THE SAME SHALL REMAIN IN FULL FORCE AND EFFECT.

WITNESS, Principal and said Surety as of the date first above written.

_____
(Principal)

APPROVED FOR SUFFICIENCY OF SURETY:

BY: _____

_____
(City Manager)

APPROVED AS TO FORM AND CORRECTNESS:

_____
(Surety)

_____ BY: _____
(Law Director)

_____
(Address of Surety)

_____

(Attach the Power of Attorney of Surety's Attorney-In-Fact)

CERTIFIED CHECK

In lieu of the foregoing Bid Bond, but subject to all the conditions enumerated therein, a Certified Check ( ), a Cashier's Check ( ), (CHECK ONE) in the amount of $_____ drawn on_____ is deposited herewith.

_____ By _____
(Bidder)

Title _____

****Return completed with bid.**

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PROPOSED SUBCONTRACTORS FORM

The BIDDER is required to state the Subcontractors proposed to be utilized in the Work. Provide name, address, telephone number, and amount of subcontract. (Enter NONE, where work will be performed by the BIDDER.) Failure to list Subcontractors here may result in rejection of the Bid.

Electrical _____

_____

Plumbing _____

_____

HVAC _____

_____

Instrumentation _____

_____

Painting/Coating _____

_____

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EXPERIENCE RECORD

The BIDDER is required to state the character of previous work, give references, and such other detailed information as will enable the OWNER to determine responsibility, including experience, skill, and financial standing. Projects listed shall be for OWNERS other than this Project and ENGINEERS other than Burgess & Niple, Inc. Use additional copies of this form as required.

PROJECT NAME: _____

ENGINEER: _____ OWNER: _____

PERSON TO CONTACT: _____

PHONE: (____) _____ ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

CONTRACT VALUE: _____

DATE STARTED/COMPLETED: _____

DESCRIPTION: _____

_____

PROJECT NAME: _____

ENGINEER: _____ OWNER: _____

PERSON TO CONTACT: _____

PHONE: (____) _____ ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

CONTRACT VALUE: _____

DATE STARTED/COMPLETED: _____

DESCRIPTION: _____

_____

PROJECT NAME: _____

ENGINEER: _____ OWNER: _____

PERSON TO CONTACT: _____

PHONE: (____) _____ ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

CONTRACT VALUE: _____

DATE STARTED/COMPLETED: _____

DESCRIPTION: _____

_____

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NON - COLLUSION AFFIDAVIT

STATE OF_____)
ss:
COUNTY OF_____)

_____, Being first duly

sworn deposes and says that he/she is the _____

of_____, the Bidder which
(NAME OF PROPOSER/BIDDER)

has submitted, or on or about the_____day of _____

will submit to The City of Springfield, Ohio a bid/proposal for _____

_____.

All as fully set forth in said bid/proposal; and that except as specified below, the aforementioned bidder constitutes the only person, firm or corporation having an interest in said bid or in any contract, benefit or profit which may, might or could accrue or grow out of the acceptance in whole or in part of said bid/proposal, said exceptions beings as follows:

If None, the word "NONE" should be inserted

Affiant further states that said bid/proposal is in all respects fair and is submitted without collusion or fraud; and that no member of The City Commission or officer or employee of said City is directly or indirectly interest in said Bid/Proposal.

_____
AFFIANT

SWORN TO AND SUBSCRIBED BEFORE ME, A NOTARY PUBLIC IN AND FOR THE ABOVE NAMED STATE AND COUNTY, this_____day of _____

_____
NOTARY PUBLIC

***Return completed with bid.**

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CERTIFICATE OF AUTHORIZATION

TO SIGN

BIDS, PROPOSALS, AND SURETY BONDS

I, the Undersigned _____

hereby certify that I am _____ of the

_____ Co./ Corp. / Inc., and that by

action of the _____ on

_____ and pursuant to the By-Laws of said Company, did authorize the following

individual(s) to sign bids, proposals, and surety bonds on behalf of and binding upon this Company.

_____TITLE: _____

_____TITLE: _____

_____TITLE: _____

_____TITLE: _____

IN WITNESS THEREOF, I have hereunto set my hand as

_____ of _____
(Title) (Company)

this _____day of _____, 20_____.

SIGNED: _____

***Return completed with bid.**

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AFFIDAVIT - CITY INCOME TAX

STATE OF OHIO)
) SS:
COUNTY OF CLARK)

_____ being first duly sworn deposes and says as follows:

1. That he holds the office of _____ in the_____

_____ Company, with a mailing address of _____,

_____ and telephone number (____) _____, which company duly

executed a contract with the City of Springfield, Ohio, under date _____ to perform

construction work as specifically outlined in said contract and commonly known as

_____.

2. That said company has complied in all respects with the City of Springfield Income Tax Ordinances and Regulations, as the same pertain to said construction project.

3. That said company has subcontracted with the companies listed below in connection with this project.

Subcontracting Company Name	Company Address	Telephone Number
_____	_____	(____) _____
_____	_____	(____) _____
_____	_____	(____) _____

(If more listings are required, attach additional sheets.)

4. That said company will provide the City with such information regarding additional subcontractors which are used by the company for this project within seven days of contracting with the additional subcontractor.

5. More affiant sayeth not.

_____

Sworn to and subscribed in my presence this_____ day of _____, 20 _____.

_____
NOTARY PUBLIC

***Prime contractor completes (construction project).**

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Minority and Disadvantage Business Enterprise Requirements

It is the policy of the City of Springfield, Ohio that Minority and Disadvantage Business Enterprises, as defined in Chapter 153 of the City of Springfield Codified Ordinances, shall have the maximum practical opportunity to participate in the performance on contracts let by the City of Springfield, Ohio.

For the purpose of complying with the ordinance, the following definitions apply:

a. 1. "Minority Business Enterprises," (hereinafter "MBE") means a business concern which is at least fifty-one percent (51%) owned by one or more minorities or females, or in the case of a publicly-owned business, at least fifty-one percent (51%) of the stock is owned by minorities or females; whose management and daily business operations are controlled by one or more such minority or female individuals; and that at least fifty-one percent (51%) of the net profits or losses attributable to the business enterprise accrues to minority or female person;

2. "Socially and economically disadvantaged individuals" (hereinafter "disadvantaged individuals") means those individuals who are citizens of the United States (or lawfully admitted permanent residents) and who are women, Black Americans, Hispanic Americans, Native Americans, Asian-Pacific Americans, or Asian-Indian Americans and any other minorities or individuals found to be disadvantaged by the Small Business Administration pursuant to section 8 (a) of the Small Business Act.

I. The policy statement, goals and objectives the City established for the Minority and Disadvantage Business Enterprises program are:

a. To ensure that Minority Business Enterprises (MBE's) and Disadvantage Business Enterprises (DBE's) have maximum opportunity to participate in all City contracts;

b. To require that all City contractors make conscientious efforts, consistent with sound procurement practices and applicable law, to utilize MBE's and DBE's in their subcontracting or supplying processes;

c. Each department of the City shall, whenever possible utilize these goals.

1. U.S. Department of Housing and Urban Development (HUD) and City 18% MBE (Use forms titled MBE)

2. U.S. Department of Transportation (DOT) 14% DBE (Use forms titled DBE)

3. Federal Aviation Administration (FAA) 18% DBE (Use forms titled DBE)

4. Federal Transportation Administration (FTA) 14% DBE (Use forms titled DBE)

d. Private corporations, firms, or persons receiving development incentives from the City, including, by not limited to, tax abatement, leases or sales of City property below market value and the

expenditure of public funds to aid in development, shall award their construction and purchase contracts in order to reach the goals set forth in this section.

II. Assurance of Meeting Percentage Requirements:

a. By submitting a signed bid, said bidder assures that he shall meet the required percentage goals for MBE/DBE utilization appropriate to the project on which he bids, unless said bidder timely demonstrates to the City his good faith efforts to attain the required percentage goals and the City modifies or waives the percentage goals of that bidder.

b. If bidder requires assistance in location Minority or Disadvantage Business Enterprises whose capabilities are consistent with contract requirements, please contact:

MINORITY BUSINESS COORDINATOR
City of Springfield
Minority Business Office
76 East High Street
Springfield, Ohio 45502
(937) 324-7379
(937) 328-3489 Fax

III. Waiver or Modification of percentage goals:

a. Where a contractor proposes to seek modification or waiver of the required MBE/DBE participation goals on the projects on which he bids, the bidder shall within ten (10) days notice to the City, satisfy the City with acceptable documentation demonstrating his/her good faith efforts to attain MBE/DBE participation percentage goals, including but not limited to the following:

1. Attendance at pre-bid meeting, if any, scheduled by the Department to inform MBE's/DBE's of subcontracting opportunities under a given solicitation;

2. Advertisement in general circulation media, trade association publications, and minority focus media for at least 20 days before bids are due. If 20 days are not available, publication for a shorter reasonable time is acceptable;

3. Written notification to MBE's/DBE's that their interest in the contract is solicited;

4. Efforts made to select portions of the work proposed to be performed by MBE's/DBE's in order to increase the likelihood of achieving a stated goal;

5. Efforts to negotiate with MBE's/DBE's for specific sub-bids including at a minimum:

   a. The names, addresses, and telephone numbers of MBE's/DBE's that were contracted.

   b. A description of the information provided to MBE's/DBE's regarding the plans and specifications for portions of the work to be performed; and

c. A statement of why additional agreements with MBE's/DBE's were not reached.

6. Concerning each MBE/DBE the bidder contacted, but rejected as unqualified, the reasons for the bidders conclusion;

7. Effort made to assist the MBE's/DBE's contracted that need assistance in obtaining bonding or required insurance.

IV. MBE/DBE Participation on Construction General Service Contracts

a. Pursuant to Chapter 153 of the Codified Ordinances of the City of Springfield, each agency or department of the City of Springfield shall, unless otherwise exempted, award its construction and general service contracts consistent with the following goals:

1. U.S. Department of Housing and Urban Development (HUD) and City 18% MBE (Use forms titled MBE)

2. U.S. Department of Transportation (DOT) 14% (Use forms titled DBE)

3. Federal Aviation Administration (FAA) 18% DBE (Use forms titled DBE)

4. Federal Transportation Administration (FTA) 14% DBE (Use forms titled DBE)

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Minority Business Enterprises (MBE) Participation Project: _____

The City of Springfield has adopted a goal for participation by Minority Business Enterprise of Eighteen percent (18%) of the total dollar value of this public works prime contract. To be eligible for award of a contract under this Invitation for Bids, a bidder must execute this Minority Business Enterprise Participation.

When determining the level of MBE participation, only the total of work performed by MBE's, either singularly or severally, will be considered.

Minority Firm Name (MBE) IRS Number & Mailing Address	Prime Contract Bid	Joint Venture Bid	Supply Service Sub-contract	Type of Service/ Supply	Construction Sub-contract	Type of Construct-ion	$ Amount to go to MBE	% of Total Bid
MFN _____ IRS # _____ Street _____ City/State _____ Zip _____ Phone ( )_____	__Yes ___ No	__Yes ___ No	__ Yes ___ No					
MFN _____ IRS # _____ Street _____ City/State _____ Zip _____ Phone ( )_____	__Yes ___ No	__Yes ___ No	__ Yes ___ No					
MFN _____ IRS # _____ Street _____ City/State _____ Zip _____ Phone ( )_____	__Yes ___ No	__Yes ___ No	__ Yes ___ No					

Total Dollar Amount of Bid $_____ Total Dollars Amount for (MBE) _____

Percent of MBE Dollars in Bid_____

CONTRACTOR'S NAME _____

CONTRACTOR'S ADDRESS _____

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LETTER OF INTENT
TO PERFORM AS A SUBCONTRACTOR

Project Location_____ Project Number _____

To: _____
(Name of Prime or General Bidder)

The Undersigned intends to perform work in connection with the above project as (check one):

_____an individual _____a corporation
_____a partnership _____a joint venture

The minority status of the undersigned is confirmed by (check one):

_____City M.B.E. Office
_____Other (identify) _____
(Submit appropriate documents)

The undersigned is prepared to perform the following described work in connection with the above project, (specify in detail particular work items or parts thereof to be performed):

_____

_____

At the following price: _____

You have projected the following commencement date for such work, and the undersigned is projecting completion of such work as follows:

Items	Projected Commencement Date	Projected Completion Date
_____	_____	_____

_____% of the dollar value of the subcontract will be sublet and/or awarded to non-minority contractors and/or non-minority suppliers. The undersigned will enter into a formal agreement for the above work with you conditioned upon your execution of a contract with the Authority.

_____ _____
(Date) (Name of Minority Contractor)

By _____

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M.B.E. Unavailability Certification

I,_____,_____, of _____
(Name) (Title) Prime or General Bidder
certify that on_____, I contacted the following minority contractor to obtain a bid for work items to be performed on Authority Contract No._____.

Minority Contractor	Work Items Sought	Form of Bid Sought (i.e., Unit Price, Materials & Labor, Labor Only, etc.)

To the best of my knowledge and belief, said minority contractor was unavailable (exclusive of unavailability due to lack of agreement on price) for work on this project, or unable to prepare a bid, for the following reason(s):

_____

_____

_____

SIGNATURE_____DATE _____

_____ was offered an opportunity to bid on the
(Name of Minority Contractor)

above-identified work_____by_____.
(Date) (Source)

The above statement is a true and accurate account of why I did not submit a bid on this project.

SIGNATURE _____ _____
(Minority Contractor) (Title)

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Disadvantage Business Enterprise (DBE) Participation Project: _____

The City of Springfield has adopted a goal for participation by Disadvantaged Business Enterprise of Fourteen percent (14%) of the total dollar value of this public works prime contract. To be eligible for award of a contract under this Invitation for Bids, a bidder must execute this Disadvantaged Business Enterprise Participation.

When determining the level of DBE participation, only the total of work performed by DBE's, either singularly or severally, will be considered. (or percentage required by FAA)

Disadvantaged Firm Name (DBE) IRS Number & Mailing Address	Prime Contract Bid	Joint Venture Bid	Supply Service Sub-contract	Type of Service/ Supply	Construction Sub-contract	Type of Construct -ion	$ Amount to go to DBE	% of Total Bid
MFN _____ IRS # _____ Street _____ City/State _____ Zip _____ Phone ( ) _____	__Yes ___ No	__Yes ___ No	__ Yes ___ No					
MFN _____ IRS # _____ Street _____ City/State _____ Zip _____ Phone ( ) _____	__Yes ___ No	__Yes ___ No	__ Yes ___ No					
MFN _____ IRS # _____ Street _____ City/State _____ Zip _____ Phone ( ) _____	__Yes ___ No	__Yes ___ No	__ Yes ___ No					

Total Dollar Amount of Bid_____Total Dollars Amount of (DBE) _____

Percent of DBE Dollars in Bid _____

CONTRACTOR'S NAME _____

CONTRACTOR'S ADDRESS _____

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D.B.E. Unavailability Certification

I,_____,_____, of _____
(Name) (Title) Prime or General Bidder
certify that on_____, I contacted the following disadvantaged contractor to obtain a bid for work items to be performed on Authority Contract No._____.

Disadvantage Contractor	Work Items Sought	Form of Bid Sought (i.e., Unit Price, Materials & Labor, Labor Only, etc.)

To the best of my knowledge and belief, said disadvantaged contractor was unavailable (exclusive of unavailability due to lack of agreement on price) for work on this project, or unable to prepare a bid, for the following reason(s):

_____

_____

_____

SIGNATURE_____DATE _____

_____ was offered an opportunity to bid on the
(Name of Disadvantage Contractor)

above-identified work_____by_____.
(Date) (Source)

The above statement is a true and accurate account of why I did not submit a bid on this project.

SIGNATURE _____ _____
(Disadvantaged Contractor) (Title)

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LETTER OF INTENT
TO PERFORM AS A SUBCONTRACTOR

Project Location_____ Project Number _____

To: _____
(Name of Prime or General Bidder)

The undersigned intends to perform work in connection with the above project as (check one):

_____an individual _____a corporation
_____a partnership _____a joint venture

The minority status of the undersigned is confirmed by (check one):

_____City D.B.E. Office
_____Other (identify) _____
(Submit appropriate documents)

The undersigned is prepared to perform the following described work in connection with the above project, (specify in detail particular work items or parts thereof to the performed):

_____

_____

At the following price: _____

You have projected the following commencement date for such work, and the undersigned is projecting completion of such work as follows:

Items	Projected Commencement Date	Projected Completion Date
_____	_____	_____

_____% of the dollar value of the subcontract will be sublet and/or awarded to non- disadvantaged contractors and/or non- disadvantaged suppliers. The undersigned will enter into a formal agreement for the above work with you conditioned upon your execution of a contract with the Authority.

_____ _____
(Date) (Name of Disadvantaged Contractor)

By _____

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CITY OF SPRINGFIELD, OHIO
CONTRACT COMPLIANCE
EQUAL EMPLOYMENT OPPORTUNITY ASSURANCES

FIRM'S NAME	TRADE
ADDRESS	CITY STATE ZIP
PHONE	FAX NUMBER
EEO OFFICER OR CONTRACT PERSON	PROJECT NO. AND NAME
E-MAIL ADDRESS	

The undersigned Bidder (you):

____ **Agrees** to complete the applicable affirmative action forms contained in this "Instruction to Bidders" and submit with bids.

____ **Agrees** to fully comply with all of the provisions of Springfield City Ordinance Chapter 155 as amended and Executive Order 11246. *Ask for copy if needed.*

____ **Understands** that failure to complete all applicable forms *may result in bid rejection.*

_____
Authorized Representative

_____
Date

CHECK ONE:

____ Submitting own A.A.P.

____ Has approved A.A.P. on file (See Supplement #2)
A.A.P. Contract Number _____

____ Submitting City's A.A.P. format (See Supplement #3)

____ Submitting Certification of Compliance (See Supplement #2)

____ Not applicable: Reason(s) _____

_____

____ Submitting____Semi-annual or_____annual A.A.P. for approval

Original signatures needed. Please mail or drop off completed forms at City Hall.

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INFORMATION FOR BIDDERS

SUPPLEMENT NO. 1

EQUAL EMPLOYMENT
OPPORTUNITY

The attention of bidders is called to the requirement of ensuring that employees and applicants for employment are not discriminated against because of their race, religion, creed, color, sex, ancestry, or national origin.

To ensure compliance with this requirement, prospective prime and subcontractors who employ **four or more persons**, must develop a written Affirmative Action Program containing goals and timetables for implementation of said program and the goals to which Contractor's good faith efforts must be directed.

Under Springfield City Ordinance Chapter 155, the requirements for a written Affirmative Action Program applies to **all prime and subcontracts** from available minority subcontractors, including circulation of bid invitations to minority contractor associations.

Bidders whose bid will be for $10,000 or more must submit the required written Affirmative Action Program with their bids.

The successful bidder will be requested to solicit bids for any subcontracts from available minority subcontractors, including circulation of bid invitations to minority contractor associations.

Questions concerning the City's Equal Employment Opportunity Policy and the required written Affirmative Action Program should be directed to:

The City of Springfield
Community Development Department
76 East High Street
Springfield, Ohio 45502
(937) 324-7379
(937) 328-3489 Fax

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INFORMATION FOR BIDDERS

SUPPLEMENT NO. 2

BIDDERS WHO HAVE PREVIOUSLY SUBMITTED AFFIRMATIVE ACTION PROGRAMS

Contractors who have previously filed Affirmative Action Programs with the City of Springfield, Ohio and whose programs were approved by the City's Contract Compliance Officer, within, six months of the date of this bid, should up-date their said programs to account for any changes since they were submitted and may forego re-submitting Affirmative Action Programs with their new bids.

In lieu of submitting their Affirmative Action Programs, such bidders should sign the following statement:

As officers and representatives of _____
(Name of Firm)
we, the undersigned, state that we are fully implementing the Affirmative Action Program previously submitted to and approved by the City of Springfield, Ohio.

Signature:_____ Signature: _____

Title:_____ Title: _____

Date:_____ Date: _____

BIDDERS WHOSE PROGRAMS HAVE BEEN APPROVED BY ANOTHER CONTRACTING AGENCY

Contractors who have filed, or become a signatory to a governmentally recognized Affirmative Action in another jurisdiction, may comply with the requirements of Chapter 155 of the City's Codified Ordinance by obtaining a certificate from the previous contracting agency certifying that said contractor is in compliance with his Affirmative Action Program **and** by filing said certificate and a copy of his Affirmative Action Program with the Contracts Compliance Officer.

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AFFIRMATIVE ACTION PROGRAM FORMAT

SUPPLEMENT NO. 3

I. EQUAL EMPLOYMENT OPPORTUNITY POLICY

_____ agrees that recruiting, hiring, training, pay,
(Name of Contractor)
job classification, promotions and termination of employment shall be accomplished without regard to race, religion, color, sex, ancestry or national origin. The standards for recruiting, hiring, placement, training, pay, job classification, promotion, termination of employment and all other terms and conditions of employment shall not draw a distinction based upon race, religion, color, sex, ancestry or national origin, nor may they be applied inconsistently to deny any person equality or opportunity on these basis.

Further,_____agrees to implement the following
(Name of Contractor)
specific affirmative action steps directed at increasing minority manpower utilization:

A. RECRUITING

1. All job openings shall be posted on appropriate employee bulletin boards throughout our company offices concurrent with their announcement via other media or sources.
2. Notice of all job openings with the company shall be provided directed at minority and women's organizations and training organizations within the contractor's recruitment area.
3. In the event that recruiting for personnel is utilized through professional groups or organizations, such recruiting shall not be limited to predominantly non-minority professional groups or organizations.
4. All notices of job openings shall indicate that the company is an "Equal Opportunity Employer".

B. HIRING

1. The company when hiring and promoting employees will make every reasonable attempt to place qualified women and minorities into all phases of its workforce to ensure that the percentage of distribution of women and minorities throughout all levels of its workforce are representatives of the percentage and distribution of women and minorities in the community labor force.
2. Employment forms and applications shall be void of all references to race, religion, color, sex, ancestry, or national origin except as may be required to meet Equal Employment Opportunity Commission or other legal requirements.
3. Employment applications shall state in writing the length of time they will remain on file for active consideration and the method or renewing such applications upon their expiration from active consideration.
4. Applicants for employment will remain in consideration until a final decision is made as to which applicant will be hired.
5. Applicants will be provided, upon their written request, with a written indication

of the reasons why they were not selected for and job for which they applied.

6. Any applicant receiving an adverse recommendation from a former employer will be afforded an opportunity to refute the contents of the recommendations prior to the day of the final decision as to which applicants will be hired.
7. All applicants will be requested to complete fully and thoroughly and all employment applicant forms. Applicants shall be given whatever assistance is necessary in order to enable them to do so. Clarification of any entries will be sought from the applicant at the time the application is submitted. If additional clarification or information about the applicant is required, he/she shall be contacted by the company and requested to provide such clarification as might be necessary for his/her consideration for employment.
8 All pre-employment forms and applicants shall be void of any reference to arrest records. Applicants will be required to grant a release of criminal records and medical records for those positions which require background investigation by the nature of the duties involved.
9. Records of criminal convictions may be used as a bar to employment only when they indicate, given the nature of the crime and the nature of the job, that employment of the individual and the job in question would seriously compromise the health, security or safety of the company.
10. Records of garnishment will not be used as a bar to employment.
11. All job descriptions and/or criteria for employment in each job classification will be made as explicit as possible and will be accessible to all employees and applicants alike.
12. All non-professional, pre-employment interviews conducted by the company shall be limited to the following items which will be discussed during such interviews:

    a. Clarification of items listed on the employment application.
    b. Clarification of the applicant's qualifications for the job in question.
    b. Clarification of the applicant's availability for work.
    c. Discussion of wages and benefits available with the company.
    d. Discussion of the nature of duties of the job in question.

C. TERMS AND CONDITIONS OF EMPLOYMENT

1. Pregnancy and childbirth are justified reasons for a leave of absence in accordance with general sick leave policies.
2. Disparities and pay between persons holding the same qualification shall be eliminated except for differences in pay plan achieved by services and merit.
3. All employees shall be advised upon their hire and at least once per year thereafter, of promotion policies and any and all educational benefits or programs offered by or through the company that would qualify them for promotions.
4. Minorities and women employees who appear to have potential management or supervisory abilities will be encouraged to take the appropriate training to qualify them for promotions.
5. The company agrees to participate in training programs in the area, especially those funded by the U.S. Department of Labor.
6. The company agrees to disseminate its affirmative action policy within its own organization by including it in any policy manual; by publicizing it in the

company newspaper; by posting of the policy; and by specific review of the policy with minority employees.

7. Any employee found to be harassing or unfairly treating any person because his/her race, religion, color, sex, ancestry, or national origin will be subject to disciplinary action.
8. Any employee feeling that he or she has been discriminated against because of his or her race, religion, color, sex, ancestry or national origin shall have the right to seek a remedy through established grievance procedures.
9. The terms, conditions, or records of employment of any employee shall not be adversely affected in any manner because he or she has made charges, testified, or assisted in any manner in hearings or proceedings involving the company in human rights cases before any council, governmental body or court of law nor shall such terms, conditions or records of employment be adversely affected because he or she has utilized existing grievance procedures to seek a remedy for a discrimination grievance.

D. PROMOTIONS

1. All notices of opportunity for promotions will be posted in accordance with established guidelines for the posting of job openings.
2. Women and minority employees who are qualifiable for promotions will be afforded the necessary training to qualify them for promotion where such training can feasibly be provided by the company or affiliated program.
3. The company may enter into contractual agreements with other community programs to provide specialized training. Such programs may involve institutions of higher learning or community action agencies in the contractor's operating area.

E. LABOR CONTRACTS AND BARGAINING AGREEMENTS

I. The company agrees to notify the Springfield Office of Contracts Compliance and/or the HUD Area Office promptly when the union or unions with whom he has a collective bargaining agreement has not referred to the company a minority worker sent by the company, or when the company has other information that the union referral process has impeded the company in its efforts to meet its goals.

II. Given below is the name, title, address and phone number of the person appointed by the applicant who will be responsible for submitting the Monthly Manpower Utilization Report.

_____

_____

III. GOAL AND TIMETABLES

Every effort shall be directed to increase, materially, the number of minorities and females at all levels and in all segments of the workforce where few, if any, minority and female persons are employed.

Goals and timetables shall be part of the company's Affirmative Action Program and shall be maintained on a year to year basis. If we cannot meet the established goals and timetables, it will be evaluated on its good faith efforts.

In Table I, we set forth a minority and female breakdown by job category of our present workforce on a company-wide basis covering all contracts.

In Table II, we set forth our company's goals and timetables for minority utilization.

(MUST BE SIGNED)

As Officers and Representatives of _____
(Name of Contractor)

We, the undersigned, have read and fully agree to this Affirmative Action Program, and become a party to the full implementation of this program.

Signature _____

Title_____ Date _____

Signature _____

Title_____ Date _____

Signature _____

Title_____ Date _____

NOTE: Please complete the **Current Total Workforce Breakdown** located on the following page. In an attempt to find out how many Springfield, Ohio residents are working for your company, include the Springfield Residents portion located at the bottom of the Workforce Breakdown form.

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CURRENT TOTAL WORKFORCE BREAKDOWN

NAME AND LOCATION FIRM:

COVERED AREA OF DATA

Compiled By: _____ **Date:** _____

JOB CATEGORY CLASSIFICATION	1. TOTAL NUMBER OF EMPLOYEES		2. TOTAL NUMBER OF MINORITY EMPLOYEES		3. MINORITY GROUP EMPLOYEES								4. MINORITY PERCENT	5. FEMALE PERCENT
					A. BLACK (NOT OF HISPANIC ORIGIN)		B. HISPANIC		C. ASIAN OR PACIFICA ISLANDERS		D. AMERICAN INDIAN OR ALASKAN NATIVE			
	M	F	M	F	M	F	M	F	M	F	M	F		
OFFICERS/ MANAGERS														
PROFESSIONALS														
TECHNICIANS														
SALES WORKERS														
OFFICE/CLERICAL														
SERVICE WORKERS														
OTHERS														
TOTAL														
TRADE NAME J														
AP														
TR														
TOTAL														
TRADE NAME J														
AP														
TR														
TOTAL														
TRADE NAME J														
AP														
TR														
TOTAL														
GRAND TOTAL														
SPRINGFIELD RESIDENTS														

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GOALS AND TIMETABLES FOR MINORITY UTILIZATION

COLUMN 1	COLUMN 2	COLUMN 3	COLUMN 4	COLUMN 5
Job Category for Skilled Trade	Contractor's Minority Utilization Commitment	Estimated Total Employees	Estimated Minority Employees	Date Commitment To be Achieved

_____
(Company)

_____
(E.E.O. Officer Signature)

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NOTICE OF AWARD

To: _____ Date: _____, 2020

_____

_____

Project Description: EASTERN PRESSURE DISTRICT WATERLINE UPGRADE

The OWNER has considered the Bid submitted by you on _____, 2020 (Bid Date) for the above described work in response to its Advertisement for Bids and Instructions to Bidders.

You are hereby notified that your Bid has been accepted in the amount of

$_____.

You are required by the Instructions to Bidders to execute the Agreement and furnish the required CONTRACTOR's Bonds (if applicable) and Certificates of Insurance within 10 calendar days from the date of this notice to you.

If you fail to execute said Agreement and to furnish said Bonds within 10 calendar days from the date of this notice, said OWNER will be entitled to consider all your rights arising out of the OWNER's acceptance of your Bid as abandoned and as a forfeiture of your Bid Bond. The OWNER will be entitled to such other rights as may be granted by law.

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

ACCEPTANCE OF NOTICE

Receipt of the above Notice of Award is hereby acknowledged

_____
OWNER

By _____
CONTRACTOR

this the _____ day of

_____ 2020.

By _____

Name _____

Title _____

By _____

Name _____

Title _____

Copy: Contractor's Surety
Surety's Agent

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AGREEMENT

This Contract made and entered into as of the ___ day of _____, 20__, by and between The City of Springfield, Ohio ("City") and _____("Contractor").

WITNESSETH: That for and in consideration of the payments and agreements hereinafter mentioned:

Section 1. The Contractor will provide all necessary labor, materials and equipment required by the Contract Documents and perform all work necessary for the Eastern Pressure District Waterline Upgrade Project.

Section 2. The Contractor will commence and complete the work required by the Contract Documents within the time required by the Contract Documents, unless the period of completion is extended, as otherwise provided by the Contract Documents.

Section 3. The City agrees to pay, and the Contractor agrees to accept as full payment, for all work performed in accordance with the Contract Documents at the unit price or lump sum amount quoted by the Contractor for such work in the Contractor's written bid to the City; provided, however, that the total amount paid pursuant to this Contract shall not exceed $_____ unless authorized by ordinance adopted by the City Commission of the City.

Section 4. The term Contract Documents as used in this contract refers to those specifications and documents issued in booklet form prepared by the City Finance Department and captioned **" Springfield Eastern Pressure District Waterline Upgrade"**, and CITY OF SPRINGFIELD, OHIO DEPARTMENT OF ENGINEERING CONSTRUCTION SPECIFICATIONS AND STANDARD DRAWINGS, copies of which the Contractor acknowledges having received, together with all addenda thereto, if any, along with the Contractor's written bid, bid sheet and the Contractor's Affidavit as to delinquent personal property tax, a copy of which is attached hereto. Said Contract Documents are hereby incorporated in and made a part of this contract as if they were specifically set forth herein.

Section 5. Warning: It is unlawful for officials and employees of City to receive gratuities. Discrimination by Contractor on grounds of race, religion, color, ancestry, national origin, or sex is unlawful and shall subject Contractor to forfeiture.

Section 6. The Contractor warrants that the purchase price set forth in Section 3 hereof do not include any federal or state excise, sales or use taxes for the payment of which the City is not legally liable.

Section 7. The applicable laws of the City of Springfield, Ohio and the State of Ohio shall govern this Contract, including but not limited to matters of validity, construction, effect and performance.

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Section 8. To the extent that any provision of this Contract is held to be invalid, that provision shall be deemed deleted from this Contract and the remaining provisions shall remain in full force and effect.

Section 9. This Contract shall be executed in identical counterparts; each of which, when so executed and delivered, shall be deemed an original and all signatures delivered by facsimile and/or electronically shall be as effective as original signatures.

Section 10. By affixing the signature below the same represents that he/she is a duly authorized officer with authority to act on behalf of and bind Contractor to this contractual agreement.

IN WITNESS WHEREOF, the parties hereto, by their duly authorized representatives in the premises, have hereunto set their hands to duplicate originals as of date first above written.

APPROVED AS TO FORM
AND CORRECTNESS:
Jill N. Allen, Law Director

By: _____
Assistant Law Director

Date _____

I hereby certify that the money required for payment of the above obligation in the sum of $ _____ at the time of the making of this contract or order, was lawfully appropriated for such purpose and was in the treasury or in process of collection to the credit of the proper item of appropriation free from any previous encumbrance.

_____
Finance Director

THE CITY OF SPRINGFIELD, OHIO

BY _____
Bryan Heck, City Manager

XXXXXXXXXXXXX

BY _____
Its

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NOTICE TO PROCEED

To: _____ Date: _____

_____

_____

Project Description: _____

_____

You are hereby notified to commence work in accordance with the Agreement dated _____, 2020, on or before _____, 2020, and you are to complete the work within _____ calendar days thereafter. The date of completion of all work is therefore _____ _____, 2020.

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

_____
OWNER

By _____

Name _____

Title _____

ACCEPTANCE OF NOTICE

Receipt of the above Notice to
Proceed is hereby acknowledged

By _____
CONTRACTOR

this the _____ day of

_____ 2020

By _____

Name _____

Title _____

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PERFORMANCE AND PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS, that we, the undersigned _____ _____ as principal and whose address is _____ _____ and _____ as sureties, are hereby held and firmly bound unto The City of Springfield, Ohio in the penal sum of _____ dollars ($ _____), for the payment of which well and truly to be made, we hereby jointly and severally bind ourselves, our heirs, executors, administrators, successors, and assigns.

Signed this _____ day of _____, _____.

THE CONDITION OF THE ABOVE OBLIGATION IS SUCH , that whereas the above named principal did on the _____ day of _____, _____, enter into a contract with The City of Springfield, Ohio, which said contract is made a part of this bond the same as though set forth herein;

Now, if the Principal shall well and faithfully do and perform the things agreed by Principal to be done and performed according to the terms of said contract, contract specifications, instructions to bidders, and the contractor's bid; 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 for be the 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 the said contract or in or to the plans or specifications therefore shall in any way affect the obligations of said surety on its bond.

The parties to this bond recognize that the Ohio Department of Transportation has provided funding for the project to which this bond applies thereby enabling the project, that the parties hereto benefit from the funding provided by the Ohio Department of Transportation enabling the subject project and do hereby agree that the Ohio Department of Transportation is a third part beneficiary of this bond and shall enjoy the same rights as obligee, The City of Springfield, Ohio to enforce this bond.

_____
(Name of Principal)

APPROVED FOR SUFFICIENCY OF SURETY:

BY:_____

_____
(City Manager)

_____
(Name of Surety)

APPROVED AS TO FORM AND CORRECTNESS:

BY:_____

_____
(Address)

_____
(Law Director)

_____

_____

(Attach the Power of Surety's Attorney-In-Fact)

***Successful bidder must use this form.**

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CERTIFICATE OF INSURANCE

Producer CODE SUB-CODE	This Certificate is issued as a matter of information only and confers no rights upon the certificate holder. This Certificate does not amend, extend, or alter the coverage afforded by the policies below.
	COMPANIES AFFORDING COVERAGE
	Company Letter A
INSURED	Company Letter B
	Company Letter C
	Company Letter D
	Company Letter E

COVERAGES

This is to certify that the policies of insurance listed below have been issued to the insured named above for the policy period indicated, notwithstanding any requirement, term, or condition of any contract or other document with respect to which this certificate may be issued or may pertain. The insurance afforded by the policies described herein is subject to all the terms, exclusions, and conditions of such policies. Limits shown may have been reduced by paid claims.

CO LTR Type of Insurance	Policy Number	Policy Effective Date (MM/DD/YY)	Policy Expiration Date (MM/DD/YY)	All Limits in Thousands
General Liability Commercial General Liability Claims Made Occur. Owner's and Contractor's Prot.				General Aggregate $
				Products-Comp/OPS Aggregate $
				Personal and Advertising Injury $
				Each Occurrence $
				Fire Damage (Any One Fire) $
				Medical Expense (Any One Person) $
Automobile Liability Any Auto All Owned Autos Scheduled Autos Hired Autos Nonowned Autos Garage Liability				Combined Single Limit $
				Bodily Injury (per person) $
				Bodily Injury (per accident) $
				Property Damage $
Excess Liability Other Than Umbrella Form				Each Occurrence $ Aggregate $
Worker's Compensation and Employer's Liability				Statutory $ Each Accident $ Disease-Policy $ Disease-Each
Other				

Description of Operations/Locations/Vehicles/Restrictions/Special Items

Certificate Holder	Cancellation Should any of the above described policies be canceled before expiration date thereof, the issuing company will mail 30 days' written notice to the certificate holder named to the left. Authorized Representative

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Contractor's Application for Payment **Contractor's Progress Estimate No. _____**

Date of Issuance: _____ Effective Date: _____

Project:

Owner:	Contract No.:	Date of Contract:
Contractor:		Engineer:

RECAP

	Contract Amount			Completed To Date		
	Labor	Material	Total	Labor	Material	Total
Original Contract						
Extra Orders						
Deduction						
Totals						
Less Retainer ___%						
Net Completed To Date						
Material Stored						
Less Retainer						
Net Material Stored						
Total Earned To Date						
Less Amount Previously Paid						
DUE THIS ESTIMATE						
Balance to Finish						
Percent Complete						%

OWNER APPROVAL:

ENGINEER/ARCHITECT APPROVAL

CONTRACTOR'S CERTIFICATE

I hereby certify that the above materials and services have been furnished and performed in accordance with the conditions of the contract for the above work, that all amounts have been paid for work for which previous payments were issued, and that payment has not been received and there is due and unpaid on said contract

_____ DOLLARS

Contractor

Signed

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Lump Sum Estimate

Contractor's Progress Estimate No. ____

For (contract):

		SCHEDULED VALUE			WORK COMPLETED						TOTAL WORK COMPLETED				
		From Bid			From Previous Application			This Period							
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Specification Section No.	Specification Title	Labor	Materials	Total (C + D)	Labor	Materials	Total (F + G)	Labor	Materials	Total (I + J)	Labor (F + I)	Materials (G + J)	Total (L + M)	Materials Presently Stored (not in N)	Total Completed and Stored to Date (N + O)
	Total														

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Unit Price Estimate **Contractor's Progress Estimate No.**

For (contract):

Bid Item				Unit Price Bid				Work Completed this Period		Work Previously Completed		Total Work Completed				Materials Presently Stored	Total Completed and Stored to Date
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R
Bid Item No.	Item Description	Quant.	Units	Labor	Materials	Subtotal	Total	Quant.	Total	Quant.	Total	Quant.	Labor	Materials	Total	Total	Total
						E+F	C*G		G*I		G*K	I+K	E*M	F*M	G*M	Not in P	P+Q
X	Bid item description	XX	xx	$XX.XX	$XX.XX	$XX.XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX
X	Bid item description	XX	xx	$XX.XX	$XX.XX	$XX.XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX
X	Bid item description	XX	xx	$XX.XX	$XX.XX	$XX.XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX
X	Bid item description	XX	xx	$XX.XX	$XX.XX	$XX.XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX
X	Bid item description	XX	xx	$XX.XX	$XX.XX	$XX.XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX
						Grand Totals	$XX.XX	-	$XX.XX	-	$XX.XX	-	$XX.XX	$XX.XX	$XX.XX	$XX.XX	$XX.XX

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Stored Material Summary

Contractor's Progress Estimate No._____

For (contract):

A	B	C		D		E		F
		Stored Previously		Stored this Month		Incorporated in Work		
Spec. Section No.	Materials Description	Date (Month/Year)	Amount ($)	Amount ($)	Subtotal	Date (Month/Year)	Amount ($)	Materials Remaining in Storage ($) (D + E - F)
	Totals							

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DELINQUENT PERSONAL PROPERTY TAX
Section 5719.042 ORC

After the award by a taxing district of any contract let by competitive bid and prior to the time the contract is entered into, the person making a bid shall submit to the district's fiscal officer a statement affirmed under oath that the person with whom the contract is to be made was not charged at the time the bid was submitted with any delinquent personal property taxes on the general tax list of personal property of any county in which the taxing district has territory or that such person was charged with delinquent personal property taxes on any such list, in which case the statement shall also set forth the amount of such due and unpaid delinquent taxes and any due and unpaid penalties and interest thereon. If the statement indicated that the taxpayer was charged with any such taxes, a copy of the statement shall be transmitted by the fiscal officer to the county treasurer within thirty (30) days of the date it is submitted.

A copy of the statement shall also be incorporated into the Contract, and no payment shall be made with respect to any contract to which this section applies unless such statement has been so incorporated as a part thereof.

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DELINQUENT PERSONAL PROPERTY TAX AFFIDAVIT

STATE OF _____
COUNTY OF _____

_____, being first duly sworn, deposes and says that he/she

is _____ of _____the successful
(Sole owner, a partner, president, secretary, etc.)

BIDDER on the attached Contract with the City of Springfield and for the purpose of complying with Section 5719.042 of the Ohio Revised Code states that at the time the bid for said Contract was submitted, said BIDDER _____(was/was not) charged with delinquent personal property taxes on the general tax list of personal property of a county in which the City of Springfield has territory (Clark County). The amount of such due and unpaid delinquent taxes, penalties and interest thereon is as follows.

TAXES	PENALTIES & INTEREST	COUNTY
$ _____	_____	_____
$ _____	_____	_____
$ _____	_____	_____
$ _____	_____	_____

_____
(Affiant)

Sworn to and subscribed before me this _____ day of _____, 2020.

_____
(Notary Public in and for)
My commission expires: _____

For Fiscal Officer's Use Only Auditor
Contract No. _____
Copy Mailed to County Treasurer
Date _____ Initials _____

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**AFFIDAVIT OF CONTRACTOR OR SUPPLIER
OF NO UNRESOLVED FUNDING FOR RECOVERY
BY OHIO STATE AUDITOR
(ORC 9.24)**

STATE OF OHIO:

ss:

COUNTY OF _____

TO: _____
(Owner)

The undersigned, being first duly sworn, having been awarded a contract by _____ for
(Owner)

_____ hereby states that we,
(Project Name)

_____, do not have any unresolved findings for recovery
(Name of Vendor/Contractor)

issued by the Auditor of the State of Ohio as defined in Ohio Revised Code Section 9.24. In consideration of the award of the above contract, the above statement is incorporated in said contract as a covenant of the undersigned.

_____
Signature/Title

Sworn to before me and subscribed in my presence this _ day of _____ 2020.

_____
Notary Public

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CAMPAIGN CONTRIBUTIONS AFFIDAVIT

AFFIDAVIT IN COMPLIANCE WITH SECTION 3517.13 OF THE OHIO REVISED CODE

STATE OF_____)
) SS:
COUNTY OF_____)

Personally appeared before me the undersigned, a bidder in a competitive bidding for

_____ , for a contract for _____
(Contractor) (Project Title)
to be let by _____, Ohio who, being duly cautioned and sworn,
(Owner)
makes the following statement with respect to prohibited activities constituting a conflict of

interest under Section 3517.13 Ohio Revised Code:

1. That no person or persons, who are owners of at least twenty percent of the above-named business or corporation nor any spouse of such person, has made, as an individual, within the two previous calendar years, one or more contributions totaling in excess of one thousand dollars to a candidate for or the holder of a public office having ultimate responsibility for the award of this contract, or to his/her campaign committee, nor have they aggregately given contributions totaling more than one thousand dollars.

2. That no person employed by the above-named firm, nor their spouses are in violation of any provision of Ohio Revised Code Section 3517.13.

_____
Signature

_____
Title

Subscribed and sworn before me this _____ day of _____, 2020

Notary Public _____

My commission expires _____

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AFFIDAVIT OF CONTRACTOR OR SUBCONTRACTOR

DEBARMENT, SUSPENSION, OR OTHER RESPONSIBILITY CERTIFICATION

Under Executive Order 12549 an individual or organization debarred or excluded from participation in Federal assistance or benefit programs may not receive any assistance award under a Federal program or a subagreement thereunder for $25,000 or more.

Accordingly, each prospective recipient of an EPA grant, loan, or cooperative agreement and any contract or subagreement participant thereunder must complete the attached certification provide an explanation why they cannot. For further details, see the regulation 40 CFR 32.510, Participants' responsibilities.

Go to www.epls.gov to access the Excluded Parties List System (EPLS). The EPLS includes information regarding entities debarred, suspended, proposed for debarment, excluded or disqualified under the nonprocurement common rule, or otherwise declared ineligible from receiving Federal contracts, certain subcontracts, and certain Federal assistance and benefits. This information may include names, addresses, DUNS numbers, Social Security Numbers, Employer Identification Numbers or other Taxpayer Identification Numbers, if available and deemed appropriate and permissible to publish by the agency taking the action.

Where to Submit

The prospective EPA grant, loan, or cooperative agreement recipient must return the signed certification or explanation with its application to Ohio EPA.

A prospective prime contractor must submit a complete certification or explanation to the individual or organization awarding the contract.

Each prospective subcontractor must submit a complete certification or explanation to the prime contractor for the project.

Applicants may reproduce these materials as needed and provide them to their prospective prime contractor, who, in turn, may reproduce and provide them to prospective subcontractors.

Additional copies / assistance may be requested from:

Ohio EPA
Division of Environmental and Financial Assistance
P.O. Box 1049
Columbus, Ohio
43216-1049
(614) 644-2798
www.epa.state.oh.us/defa/

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DEBARMENT, SUSPENSION, OR OTHER RESPONSIBILITY CERTIFICATION

The prospective participant certifies to the best of its knowledge and belief that it and its principals:

(a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

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

(c) Are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (b) of this certification;

(d) Have not within a three year period preceding this application / proposal had one or more public transactions (Federal, State, or local) terminated for cause or default; and

(e) Will not utilize a subcontractor or supplier who is unable to certify (a) through (d) above.

I understand that a false statement on this certification may be grounds for rejection of this proposal or termination of the award. In addition, under 18 USC Sec. 1001, a false statement may result in a fine of up to $10,000 or imprisonment for up to 5 years, or both.

_____ _____
(Witness) (Signature of Office or Agent)

Sworn to and subscribed in my presence this _____ day of _____, 201_.

_____
(Notary Public)

My Commission Expires _____

☐ I am unable to certify to the above statements. My explanation is attached.

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Request for Interpretation No. _____

Date of Issuance by Contractor: _____

Project Name:

From Contractor:	Contact Name:
To Engineer:	Contact Name:

Attention:
This RFI must be issued by the Contractor to the Engineer in accordance with General Conditions paragraph 3.03., within 30 days of the event giving rise to the question.

Contractor's Request for Interpretation:

Date Written Interpretation Issued:	Interpretation by:

Written Interpretation from Engineer:

Copy to Owner

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CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS

TO: _____
_____
_____

PROJECT: _____

CONTRACT DATE: _____

State of _____
County of _____

The undersigned, hereby certifies that to the best of their knowledge, information, and belief, except as listed below, the Releases or Waivers of Lien attached hereto include the Contractor, all Subcontractors, all suppliers of materials and equipment, and all performers of work, labor or services who have or may have liens against any property of the Owner arising in any manner out of the performance of the Contract referenced above.

EXCEPTIONS: (If none, write "None." If required by the Owner, the Contractor shall furnish bond satisfactory to the Owner for each exception.)

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.

2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

CONTRACTOR: _____

ADDRESS: _____

BY: _____ _____
(Witness)

Subscribed and sworn to before me this _____ day of _____, 2020.

_____
Notary Public

My Commission Expires _____

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Field Order No. _____

Date of Issuance: _____ Effective Date: _____

Project:

Owner:	Contract No.:	Date of Contract:
Contractor:		Engineer:

Attention:
The Contractor is hereby directed to promptly execute this Field Order issued in accordance with General Conditions Paragraph 11.01 A., for minor changes in the Work without changes in Contract Price or Contract Times. If you consider that a change in Contract Price or Contract Times is required, please notify the Engineer within 30 days of the receipt of the field order by submitting Section 00 63 66, "Contractor Written Notice for Claim".

Reference _____ _____
(Specification Section[s]) (Drawing[s] / Detail[s])

Description:

Attachments:

Receipt Acknowledged by (Contractor):	Date:

Copy to Owner

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Work Change Directive No. _____

Date of Issuance: _____ Effective Date: _____

Project:

Owner:	Contract No.:	Date of Contract:
Contractor:		Engineer:

You are directed to proceed promptly with the following change(s):
Description:
Purpose of Work Change Directive:
Attachments (List documents supporting change):

If a claim is made that the above change(s) have affected Contract Price or Contract Times, any claim for a Change Order based thereon will involve one or more of the following methods of determining the effect of the change(s).

Method of determining change in Contract Price:

- ☐ Unit Prices
- ☐ Lump Sum
- ☐ Other _____

Estimated increase (decrease) in Contract Price: $_____
If the change involves an increase, the estimated amount is not to be exceeded without further authorization.

Method of determining change in Contract Times:

- ☐ Contractor's records
- ☐ Engineer's records
- ☐ Other _____

Estimated increase (decrease) in Contract Times: Substantial Completion: _____ days; Ready for final payment: _____ days. If the change involves an increase, the estimated times are not to be exceeded without further authorization.

RECOMMENDED:

_____
ENGINEER/ARCHITECT

By: _____
(Authorized Signature)

AUTHORIZED:

_____
OWNER

By: _____
(Authorized Signature)

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State of Ohio

CONTRACT CHANGE ORDER

RECIPIENT _____ CHANGE ORDER NBR _____

LOAN NUMBER _____ CONTRACT _____

OWDA PROJECT No. _____ DATE _____

Description of Change:

RECOMMENDED BY: _____ DATE: _____
(Engineer)

APPROVED BY: _____ DATE: _____
(Recipient)

ACCEPTED BY: _____ DATE: _____
(Contractor)

_____
(Company)

Original Contract Amt		
Previous Changes (+ / --)		
This Change (+ / --)		
Adjusted Contract Amt		

OWDA APPROVAL

The above proposal is hereby accepted and I recommend that it be approved and made a part of the contract noted above. The approval does not constitute an increase in the total loan amount, but represents approval for the work.

Ohio EPA Acceptance

Date

Chief Engineer

Date

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CHANGE ORDER INSTRUCTIONS:

All Change Orders for this work, regardless of costs and whether Water Pollution Control Loan Fund (WPCLF) or Water Supply Revolving Loan Account (WSRLA) funding will be used to finance the changes, must be submitted to Ohio EPA for review.

Changes Requiring Prior Approval

Any change which substantially modifies the Project Facilities as specified in the Ohio EPA approved Facilities Plan and Final Permit to Install or Final Plan Approval (when applicable) or alters the direct or indirect impact of the Project Facilities upon the environment must be incorporated into a Change Order. One copy of the Change Order prior to execution is to be submitted to Ohio EPA for review and prior approval of the acceptability of the change. "Prior to execution" means before the Change Order is signed by the Owner.

Ohio EPA will review the Change Order and inform the Owner of the technical, environmental and operational acceptability of the change, and give the Owner permission to proceed with the proposed work.

All Other Changes

Change Orders not requiring prior approval as described above must be submitted to Ohio EPA within one (1) month of the time at which they are approved by the Owner. Change Orders for WPCLF projects should be submitted to the Division of Environmental and Financial Assistance (DEFA) while Change Orders for WSRLA projects should be submitted to the Division of Drinking and Ground Water (DDAGW) in central office.

Change Order Approval Process

After the Change Order is executed, one (1) copy of the Change Order, including the supporting documentation, is to be sent to Ohio EPA for final review. The WPCLF/WSRLA Change Order forms must have original signatures.

Communities have the option to submit hard copies of the project Change Orders via mail to Ohio EPA or to send PDF Change Order forms and supporting documentation electronically. With either hard copy or electronic submittals, the WPCLF Change Orders should be submitted to DEFA and WSRLA Change Orders should be submitted to DDAGW - Central Office.

The dedicated e-mail address for the electronic submittal of WPCLF Change Orders is EPAWPCLFCO@epa.ohio.gov.

The dedicated e-mail address for the electronic submittal of WSRLA Change Orders is EPAWSRLACO@epa.ohio.gov.

After the Change Order is accepted and eligible costs determined, Ohio EPA will issue a letter informing the Owner and authorizing OWDA to disburse funds from Project Contingency for the work. The OEPA letter will be sent electronically. OWDA will return a PDF of the WPCLF/WSRLA Change Order form which will be signed by all parties including Ohio EPA and OWDA.

Please notify Ohio EPA if the community prefers a hard copy of change order approval documentation and then Ohio EPA and OWDA will send hard copies of approval documentation through the mail.

Payments for Change Order Work

The Owner is precluded from submitting to the OWDA payment requests for Eligible Project Costs associated with the Change Orders until such time as the Ohio EPA's approval of the Change Orders has been obtained.

Contractor Written Substantiation for Claim No. _____

Date of Issuance: _____

Project:

Owner:

Contractor:

Attention:

According to paragraph 12.01.B of the General Conditions, this written Substantiation must be submitted to the Engineer within 30 days of the event giving rise to the claim. All requested changes in the contract price or time shall be substantiated with material quotes, subcontractor quotes, man-hour estimates, and project schedules that are attached to this form. Also note that this Claim Substantiation serves as the 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.

Description of event giving rise to the Claim:

Reasons this event should be considered a change to the Contract:

Requested Change in Contract Price (according to paragraph 11.04 of the General Conditions):

+ / - $_____.__

Requested Change in Contract Time (according to paragraph 11.05 of the General Conditions):

+ / - ___ days

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List of Attached Documents Substantiating Claim:

1.
2.
3.

_____
CONTRACTOR

By: _____
(Authorized Signature)

Engineer's Response (to be filled out by Engineer):

According to paragraph 12.01 F of the General Conditions, the Engineer has 90 days to respond to the last submittal from the claimant with one of the following actions:

_____ Claim Approved

_____ Claim Approved as noted.

_____ Claim Denied

_____ Request for Information for this Claim

If the Engineer does not respond within 90 days, the claim is considered denied.

Engineer Comments:
_____
_____
_____
_____
_____

_____
ENGINEER

By: _____
(Authorized Signature)

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CERTIFICATE OF SUBSTANTIAL COMPLETION

Date of Issuance: _____

Project:

Owner:	Contract No.:	Date of Contract:
Contractor:		Engineer:

This Certificate of Substantial Completion applies to all work under the Contract Documents or to the following specified parts thereof:

TO _____
OWNER

And To _____
CONTRACTOR

The work to which this Certificate applies has been inspected by authorized representatives of OWNER, CONTRACTOR, and ENGINEER, and that work is hereby declared to be substantially complete in accordance with the Contract Documents on

_____
DATE OF SUBSTANTIAL COMPLETION

A tentative list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include an item in it does not alter the responsibility of CONTRACTOR to complete all the work in accordance with the Contract Documents. The items in the tentative list shall be completed or corrected by CONTRACTOR within _____ days of the above date of Substantial Completion.

From the date of Substantial Completion, the responsibilities between OWNER and CONTRACTOR for security, operation, safety, maintenance, heat, utilities, insurance, and warranties and guarantees shall be as follows:

OWNER: _____

_____

CONTRACTOR: _____

_____

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The following documents are attached to and made a part of this Certificate *[For items to be attached see definition of Substantial Completion as supplemented and other specifically noted conditions precedent to achieving Substantial Completion as required by Contract Documents]:*

This certificate does not constitute an acceptance of work not in accordance with the Contract Documents nor is it a release of CONTRACTOR's obligation to complete the work in accordance with the Contract Documents.

Executed by ENGINEER on _____, 2020.

_____
ENGINEER

By: _____
(Authorized Signature)

CONTRACTOR accepts this Certificate of Substantial Completion on _____, 2020.

_____
CONTRACTOR

By: _____

OWNER accepts this Certificate of Substantial Completion on _____, 2020.

_____
OWNER

By: _____
(Authorized Signature)

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CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

TO: _____
_____
_____

PROJECT: _____

CONTRACT DATE: _____

State of _____
County of _____

The undersigned, hereby certifies that, except as listed below, they have paid in full or have otherwise satisfied all obligations for all materials and equipment furnished, for all work, labor, and services performed, and for all known indebtedness and claims against the Contractor for damages arising in any manner in connection with performance of the Contract referenced above for which the Owner or his property might in any way be held responsible.

EXCEPTIONS: (If none, write "None." If required by the Owner, the Contractor shall furnish bond satisfactory to the Owner for each exception.)

SUPPORTING DOCUMENTS ATTACHED HERETO:

1. Consent of Surety to Final Payment whenever Surety is involved, consent of Surety is required.

The following supporting documents should be attached hereto if required by the Owner:

1. Contractor's Release or Waiver of Liens, conditional upon receipt of final payment.

2. Separate Releases or Waivers of Liens from Subcontractors and material and equipment suppliers, to the extent required by the Owner, accompanied by a list thereof.

CONTRACTOR: _____

ADDRESS: _____

BY: _____ WITNESS: _____

Subscribed and sworn to before me this _____ day of _____, 2020.

_____ My Commission Expires _____
(Notary Public)

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WAIVER OF LIEN
MATERIAL OR LABOR

Pursuant to ORC Section 1311.26 to 1311.32

STATE OF _____)
) SS:
COUNTY OF _____)

TO WHOM IT MAY CONCERN :

WHEREAS, the undersigned _____

has been employed by _____
(General Contractor/Owner)

to furnish labor and/or materials for _____
(Nature of the Work)
_____

for the Project known as _____

at _____ in _____
Address City

_____, _____.
County State

The last of said labor and/or materials was provided to the above described project on the _____ day of _____, 20 _____.

NOW, THEREFORE, KNOW YE, that the undersigned for and in consideration of the sum of $ _____ Dollars and other good and valuable considerations, the receipt of which is hereby acknowledged, do hereby waive and release any and all funds at any time heretofore or hereafter designated for use in connection with the above described project, under the statutes of the State of Ohio relating to Mechanics Liens, on funds for public works, on account of labor or materials, or both, furnished by the undersigned to or on account of the said firm or individual named for said building or premises.

Witness : _____ _____

Witness : _____

By : _____

Title : _____

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

My commission expires _____.

_____
Notary Public

***Prime contractor completes (construction project).**

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AFFIDAVIT OF COMPLIANCE

(STATE PROJECTS)

PREVAILING WAGES

I,_____
(Name of person signing affidavit) (Title)

do hereby certify that the wages paid to all employees of _____
(Company Name)

for all hours worked on the

_____
(Project name and location)

project, during the period from_____to _____
(Project Dates)

are in compliance with prevailing wage requirements of Chapter 4115 of the Ohio Revised Code. I further certify 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.

_____
(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.

***Prime contractor completes (construction project).**

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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 Laws and Regulations.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

EJCDC®
ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

Issued and Published Jointly by

ACEC
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ASCE
AMERICAN SOCIETY OF CIVIL ENGINEERS

National Society of Professional Engineers®

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To prepare supplementary conditions that are coordinated with the General Conditions, use EJCDC's Guide to the Preparation of Supplementary Conditions (EJCDC® C-800, 2013 Edition). The full EJCDC Construction series of documents is discussed in the Commentary on the 2013 EJCDC Construction Documents (EJCDC® C-001, 2013 Edition).

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STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

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ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

A. Wherever used in the Bidding Requirements or Contract Documents, a term printed with initial capital letters, including the term's singular and plural forms, will have the meaning indicated in the definitions below. 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, executed by Owner and Contractor, that sets forth the Contract Price and Contract Times, identifies the parties and the Engineer, and designates the specific items that are Contract Documents.

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. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

5. *Bidder*—An individual or entity that submits a Bid to Owner.

6. *Bidding Documents*—The Bidding Requirements, the proposed Contract Documents, and all Addenda.

7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid Bond or other Bid security, if any, the Bid Form, and the Bid with any attachments.

8. *Change Order*—A document 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, or other revision to the Contract, issued on or after the Effective Date of the Contract.

9. *Change Proposal*—A written request by Contractor, duly submitted in compliance with the procedural requirements set forth herein, seeking an adjustment in Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; challenging a set-off against payments due; or seeking other relief with respect to the terms of the Contract.

10. *Claim*—(a) A demand or assertion by Owner directly to Contractor, duly submitted in compliance with the procedural requirements set forth herein: seeking an adjustment of Contract Price or Contract Times, or both; contesting an initial decision by Engineer concerning the requirements of the Contract Documents or the acceptability of Work under the Contract Documents; contesting Engineer's decision regarding a Change Proposal; seeking resolution of a contractual issue that Engineer has declined to address; or seeking other relief with respect to the terms of the Contract; or (b) a demand or assertion by Contractor directly to Owner, duly submitted in compliance with the procedural requirements set forth herein, contesting Engineer's decision regarding a Change Proposal; or seeking resolution of a contractual issue that Engineer

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has declined to address. A demand for money or services by a third party is not a Claim.

11. *Constituent of Concern*—Asbestos, petroleum, radioactive materials, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. ("CERCLA"); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5501 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. ("RCRA"); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, state, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

12. *Contract*—The entire and integrated written contract between the Owner and Contractor concerning the Work.

13. *Contract Documents*—Those items so designated in the Agreement, and which together comprise the Contract.

14. *Contract Price*—The money that Owner has agreed to pay Contractor for completion of the Work in accordance with the Contract Documents. .

15. *Contract Times*—The number of days or the dates by which Contractor shall: (a) achieve Milestones, if any; (b) achieve Substantial Completion; and (c) complete the Work.

16. *Contractor*—The individual or entity with which Owner has contracted for performance of the Work.

17. *Cost of the Work*—See Paragraph 13.01 for definition.

18. *Drawings*—The part of the Contract that graphically shows the scope, extent, and character of the Work to be performed by Contractor.

19. *Effective Date of the Contract*—The date, indicated in the Agreement, on which the Contract becomes effective.

20. *Engineer*—The individual or entity named as such in the Agreement.

21. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but does not change the Contract Price or the Contract Times.

22. *Hazardous Environmental Condition*—The presence at the Site of Constituents of Concern in such quantities or circumstances that may present a danger to persons or property exposed thereto. The presence at the Site of materials that are necessary for the execution of the Work, or that are to be incorporated in the Work, and that are controlled and contained pursuant to industry practices, Laws and Regulations, and the requirements of the Contract, does not establish a Hazardous Environmental Condition.

23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, statutes, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.

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24. *Liens*—Charges, security interests, or encumbrances upon Contract-related funds, real property, or personal property.

25. *Milestone*—A principal event in the performance of the Work that the Contract requires Contractor to achieve by an intermediate completion date or by a time prior to Substantial Completion of all the Work.

26. *Notice of Award*—The written notice by Owner to a Bidder of Owner's acceptance of the Bid.

27. *Notice to Proceed*—A written notice 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.

28. *Owner*—The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract.

29. *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.

30. *Project*—The total undertaking to be accomplished for Owner by engineers, contractors, and others, including planning, study, design, construction, testing, commissioning, and start-up, and of which the Work to be performed under the Contract Documents is a part.

31. *Project Manual*—The written documents prepared for, or made available for, procuring and constructing the Work, including but not limited to the Bidding Documents or other construction procurement documents, geotechnical and existing conditions information, the Agreement, bond forms, General Conditions, Supplementary Conditions, and Specifications. The contents of the Project Manual may be bound in one or more volumes.

32. *Resident Project Representative*—The authorized representative of Engineer assigned to assist Engineer at the Site. As used herein, the term Resident Project Representative or "RPR" includes any assistants or field staff of Resident Project Representative.

33. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and that establish the standards by which such portion of the Work will be judged.

34. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements for Engineer's review of the submittals and the performance of related construction activities.

35. *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.

36. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information that are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work. Shop Drawings, whether approved or not, are not Drawings and are not Contract Documents.

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37. *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, and such other lands furnished by Owner which are designated for the use of Contractor.

38. *Specifications*—The part of the Contract that consists of written requirements for materials, equipment, systems, standards, and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable to the Work.

39. *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.

40. *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.

41. *Successful Bidder*—The Bidder whose Bid the Owner accepts, and to which the Owner makes an award of contract, subject to stated conditions.

42. *Supplementary Conditions*—The part of the Contract that amends or supplements these General Conditions.

43. *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 a Subcontractor.

44. *Technical Data*—Those items expressly identified as Technical Data in the Supplementary Conditions, with respect to either (a) subsurface conditions at the Site, or physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities) or (b) Hazardous Environmental Conditions at the Site. If no such express identifications of Technical Data have been made with respect to conditions at the Site, then the data contained in boring logs, recorded measurements of subsurface water levels, laboratory test results, and other factual, objective information regarding conditions at the Site that are set forth in any geotechnical or environmental report prepared for the Project and made available to Contractor are hereby defined as Technical Data with respect to conditions at the Site under Paragraphs 5.03, 5.04, and 5.06.

45. *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 but not limited to those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, fiber optic transmissions, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.

46. *Unit Price Work*—Work to be paid for on the basis of unit prices.

47. *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; furnishing, installing, and incorporating all materials and equipment into such construction; and may include related services such as testing, start-up, and commissioning, all as required by the Contract Documents.

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48. *Work Change Directive*—A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work.

1.02 *Terminology*

A. The words and terms discussed in the following paragraphs are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated 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 information in the Contract Documents and with the design concept of the 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 Article 10 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 15.03 or 15.04).

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.

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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. If the Contract Documents establish an obligation of Contractor with respect to specific services, materials, or equipment, but do not expressly use any of the four words "furnish," "install," "perform," or "provide," then Contractor shall furnish and install said services, materials, or equipment complete and ready for intended use.

F. Unless stated otherwise in the Contract Documents, words or phrases that 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. *Bonds*: 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 Contractor's Insurance*: When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract), the certificates and other evidence of insurance required to be provided by Contractor in accordance with Article 6.

C. *Evidence of Owner's Insurance*: After receipt of the executed counterparts of the Agreement and all required bonds and insurance documentation, Owner shall promptly deliver to Contractor, with copies to each named insured and additional insured (as identified in the Supplementary Conditions or otherwise), the certificates and other evidence of insurance required to be provided by Owner under Article 6.

2.02 *Copies of Documents*

A. Owner shall furnish to Contractor four printed copies of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies will be furnished upon request at the cost of reproduction.

B. Owner shall maintain and safeguard at least one original printed record version of the Contract, including Drawings and Specifications signed and sealed by Engineer and other design professionals. Owner shall make such original printed record version of the Contract available to Contractor for review. Owner may delegate the responsibilities under this provision to Engineer.

2.03 *Before Starting Construction*

A. *Preliminary Schedules*: Within 10 days after the Effective Date of the Contract (or as otherwise specifically required by the Contract Documents), 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;

2. a preliminary Schedule of Submittals; and

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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.

2.04 *Preconstruction Conference; Designation of Authorized Representatives*

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 2.03.A, procedures for handling Shop Drawings, Samples, and other submittals, processing Applications for Payment, electronic or digital transmittals, and maintaining required records.

B. At this conference Owner and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit and receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.05 *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 2.03.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 the component parts of the Work.

2.06 *Electronic Transmittals*

A. Except as otherwise stated elsewhere in the Contract, the Owner, Engineer, and Contractor may transmit, and shall accept, Project-related correspondence, text, data, documents, drawings, information, and graphics, including but not limited to Shop Drawings and other submittals, in electronic media or digital format, either directly, or through access to a secure Project website.

B. If the Contract does not establish protocols for electronic or digital transmittals, then Owner, Engineer, and Contractor shall jointly develop such protocols.

C. When transmitting items in electronic media or digital format, the transmitting party makes no representations as to long term compatibility, usability, or readability of the items resulting from the recipient's use of software application packages, operating systems, or

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computer hardware differing from those used in the drafting or transmittal of the items, or from those established in applicable transmittal protocols.

ARTICLE 3 – DOCUMENTS: INTENT, REQUIREMENTS, 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.

C. Unless otherwise stated in the Contract Documents, if there is a discrepancy between the electronic or digital versions of the Contract Documents (including any printed copies derived from such electronic or digital versions) and the printed record version, the printed record version shall govern.

D. The Contract supersedes prior negotiations, representations, and agreements, whether written or oral.

E. Engineer will issue clarifications and interpretations of the Contract Documents as provided herein.

3.02 *Reference Standards*

A. Standards Specifications, Codes, Laws and Regulations

1. Reference in the Contract Documents to standard specifications, manuals, reference standards, 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, reference standard, code, or Laws or Regulations in effect at the time of opening of Bids (or on the Effective Date of the Contract 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, reference standard, 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 part of the Contract Documents prepared by or for Engineer. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, 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 part of the Contract Documents prepared by or for Engineer.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies*:

1. *Contractor's Verification of Figures and Field Measurements*: Before undertaking each part of the Work, Contractor shall carefully study the Contract Documents, and check and verify pertinent figures and dimensions therein, particularly with respect to applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy that Contractor discovers, or has actual knowledge of, and shall not proceed with any Work affected thereby until the conflict,

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error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

2. *Contractor's Review of Contract Documents*: If, before or during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) actual field conditions, (c) any standard specification, manual, reference standard, or code, or (d) any instruction of any Supplier, then 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 7.15) until the conflict, error, ambiguity, or discrepancy is resolved, by a clarification or interpretation by Engineer, or by an amendment or supplement to the Contract Documents issued pursuant to Paragraph 11.01.

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 had actual knowledge thereof.

B. *Resolving Discrepancies*:

1. Except as may be otherwise specifically stated in the Contract Documents, the provisions of the part of the Contract Documents prepared by or for Engineer shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between such provisions of the Contract Documents and:

a. the provisions of any standard specification, manual, reference standard, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference as a Contract Document); 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 *Requirements of the Contract Documents*

A. During the performance of the Work and until final payment, Contractor and Owner shall submit to the Engineer all matters in question concerning the requirements of the Contract Documents (sometimes referred to as requests for information or interpretation—RFIs), or relating to the acceptability of the Work under the Contract Documents, as soon as possible after such matters arise. Engineer will be the initial interpreter of the requirements of the Contract Documents, and judge of the acceptability of the Work thereunder.

B. Engineer will, with reasonable promptness, render a written clarification, interpretation, or decision on the issue submitted, or initiate an amendment or supplement to the Contract Documents. Engineer's written clarification, interpretation, or decision will be final and binding on Contractor, unless it appeals by submitting a Change Proposal, and on Owner, unless it appeals by filing a Claim.

C. If a submitted matter in question concerns terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work under the Contract Documents, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, then Engineer will promptly give written notice to Owner and Contractor that Engineer is unable to provide a decision or interpretation. If Owner and Contractor are unable to agree on resolution of such a matter in question, either party may pursue resolution as provided in Article 12.

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3.05 *Reuse of Documents*

A. Contractor and its Subcontractors and Suppliers 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 its consultants, including electronic media editions, or reuse any 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 adaptation by Engineer; or

2. have or acquire any title or ownership rights in any other Contract Documents, reuse any such Contract Documents for any purpose without Owner's express written consent, or violate any copyrights pertaining to such Contract Documents.

B. The prohibitions 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.

ARTICLE 4 – COMMENCEMENT AND PROGRESS OF THE WORK

4.01 *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 Contract 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 Contract. 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 Contract, whichever date is earlier.

4.02 *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 such date.

4.03 *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.

4.04 *Progress Schedule*

A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.05 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 2.05) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times.

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2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 11.

B. 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, or during any appeal process, except as permitted by Paragraph 16.04, or as Owner and Contractor may otherwise agree in writing.

4.05 *Delays in Contractor's Progress*

A. If Owner, Engineer, 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 Times and Contract Price. 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.

B. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delay, disruption, or interference caused by or within the control of Contractor. Delay, disruption, and interference attributable to and within the control of a Subcontractor or Supplier shall be deemed to be within the control of Contractor.

C. If Contractor's performance or progress is delayed, disrupted, or interfered with by unanticipated causes not the fault of and beyond the control of Owner, Contractor, and those for which they are responsible, then Contractor shall be entitled to an equitable adjustment in Contract Times. 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. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays, disruption, and interference described in this paragraph. Causes of delay, disruption, or interference that may give rise to an adjustment in Contract Times under this paragraph include but are not limited to the following:

1. severe and unavoidable natural catastrophes such as fires, floods, epidemics, and earthquakes;

2. abnormal weather conditions;

3. acts or failures to act of utility owners (other than those performing other work at or adjacent to the Site by arrangement with the Owner, as contemplated in Article 8); and

4. acts of war or terrorism.

D. Delays, disruption, and interference to the performance or progress of the Work resulting from the existence of a differing subsurface or physical condition, an Underground Facility that was not shown or indicated by the Contract Documents, or not shown or indicated with reasonable accuracy, and those resulting from Hazardous Environmental Conditions, are governed by Article 5.

E. Paragraph 8.03 governs delays, disruption, and interference to the performance or progress of the Work resulting from the performance of certain other work at or adjacent to the Site.

F. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for any delay, disruption, or interference if such delay is concurrent with a delay, disruption, or interference caused by or within the control of Contractor.

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G. Contractor must submit any Change Proposal seeking an adjustment in Contract Price or Contract Times under this paragraph within 30 days of the commencement of the delaying, disrupting, or interfering event.

ARTICLE 5 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

5.01 *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.

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 permanent improvements are to be made 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.

5.02 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas*:

1. Contractor shall confine construction equipment, temporary construction facilities, the storage of materials and equipment, and the operations of workers to the Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and such other adjacent areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for (a) damage to the Site; (b) damage to any such other adjacent areas used for Contractor's operations; (c) damage to any other adjacent land or areas; and (d) for injuries and losses sustained by the owners or occupants of any such land or areas; provided that such damage or injuries result from the performance of the Work or from other actions or conduct of the Contractor or those for which Contractor is responsible.

2. If a damage or injury claim is made by the owner or occupant of any such land or area because of the performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible, Contractor shall (a) take immediate corrective or remedial action as required by Paragraph 7.12, or otherwise; (b) promptly attempt to settle the claim as to all parties through negotiations with such owner or occupant, or otherwise resolve the claim by arbitration or other dispute resolution proceeding, or at law; and (c) to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claim, and against all 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 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 directly or indirectly, in whole or in part

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by, or based upon, Contractor's performance of the Work, or because of other actions or conduct of the Contractor or those for which Contractor is responsible.

B. *Removal of Debris During Performance of the Work*: During the progress of the Work the Contractor shall keep the Site and other adjacent 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 and adjacent areas 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 of 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 structures or land to stresses or pressures that will endanger them.

5.03 *Subsurface and Physical Conditions*

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

1. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site;

2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities); and

3. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely upon the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, 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.

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5.04 *Differing Subsurface or Physical Conditions*

A. *Notice by Contractor*: If Contractor believes that any subsurface or physical condition that is uncovered or revealed at the Site 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 5.03 is materially inaccurate; or

2. is of such a nature as to require a change in the Drawings or Specifications; 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 7.15), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except with respect to an emergency) until receipt of a written statement permitting Contractor to do so.

B. *Engineer's Review*: After receipt of written notice as required by the preceding paragraph, Engineer will promptly review the subsurface or physical condition in question; determine the necessity of Owner's obtaining additional exploration or tests with respect to the condition; conclude whether the condition falls within any one or more of the differing site condition categories in Paragraph 5.04.A above; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the subsurface or physical condition in question and the need for any change in the Drawings or Specifications; and advise Owner in writing of Engineer's findings, conclusions, and recommendations.

C. *Owner's Statement to Contractor Regarding Site Condition*: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the subsurface or physical condition in question, addressing the resumption of Work in connection with such condition, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations, in whole or in part.

D. *Possible Price and Times Adjustments*:

1. Contractor shall be entitled to an equitable adjustment in Contract Price or Contract Times, or both, to the extent that the existence of a differing subsurface or physical condition, or any related delay, disruption, or interference, 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 fall within any one or more of the categories described in Paragraph 5.04.A;

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 Paragraph 13.03; and,

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c. 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.

2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times with respect to a subsurface or physical condition if:

a. Contractor knew of the existence of such condition at the time Contractor made a 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 otherwise; or

b. the existence of such condition reasonably could have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas expressly required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such commitment; or

c. Contractor failed to give the written notice as required by Paragraph 5.04.A.

3. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.

4. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the subsurface or physical condition in question.

5.05 *Underground Facilities*

A. *Contractor's Responsibilities*: The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or adjacent 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 do not warrant or guarantee the accuracy or completeness of any such information or data provided by others; 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 information and data regarding existing Underground Facilities at the Site;

b. locating all Underground Facilities shown or indicated in the Contract Documents as being at the Site;

c. coordination of the Work with the owners (including Owner) of such Underground Facilities, during construction; and

d. the safety and protection of all existing Underground Facilities at the Site, and repairing any damage thereto resulting from the Work.

B. *Notice by Contractor*: If Contractor believes that an Underground Facility that is uncovered or revealed at the Site was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, then Contractor shall, promptly after

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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 7.15), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer.

C. *Engineer's Review*: Engineer will promptly review the Underground Facility and conclude whether such Underground Facility was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy; obtain any pertinent cost or schedule information from Contractor; prepare recommendations to Owner regarding the Contractor's resumption of Work in connection with the Underground Facility in question; determine the extent, if any, to which a change is required in the Drawings or Specifications to reflect and document the consequences of the existence or location of the Underground Facility; and advise Owner in writing of Engineer's findings, conclusions, and recommendations. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.

D. *Owner's Statement to Contractor Regarding Underground Facility*: After receipt of Engineer's written findings, conclusions, and recommendations, Owner shall issue a written statement to Contractor (with a copy to Engineer) regarding the Underground Facility in question, addressing the resumption of Work in connection with such Underground Facility, indicating whether any change in the Drawings or Specifications will be made, and adopting or rejecting Engineer's written findings, conclusions, and recommendations in whole or in part.

E. *Possible Price and Times Adjustments*:

1. Contractor shall be entitled to an equitable adjustment in the Contract Price or Contract Times, or both, to the extent that any existing Underground Facility at the Site that was not shown or indicated in the Contract Documents, or was not shown or indicated with reasonable accuracy, or any related delay, disruption, or interference, causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:

    a. Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated the existence or actual location of the Underground Facility in question;

    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 Paragraph 13.03;

    c. 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; and

    d. Contractor gave the notice required in Paragraph 5.05.B.

2. If Owner and Contractor agree regarding Contractor's entitlement to and the amount or extent of any adjustment in the Contract Price or Contract Times, or both, then any such adjustment shall be set forth in a Change Order.

3. Contractor may submit a Change Proposal regarding its entitlement to or the amount or extent of any adjustment in the Contract Price or Contract Times, or both, no later than 30 days after Owner's issuance of the Owner's written statement to Contractor regarding the Underground Facility in question.

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5.06 *Hazardous Environmental Conditions at Site*

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

1. those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site; and

2. Technical Data contained in such reports and drawings.

B. *Reliance by Contractor on Technical Data Authorized*: Contractor may rely upon the accuracy of the Technical Data expressly identified in the Supplementary Conditions with respect to such reports and drawings, but such reports and drawings are not Contract Documents. If no such express identification has been made, then Contractor may rely on the accuracy of the Technical Data (as defined in Article 1) contained in any geotechnical or environmental report prepared for the Project and made available to Contractor. Except for such reliance on Technical Data, Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors 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 removing or remediating any Hazardous Environmental Condition encountered, uncovered, or revealed at the Site unless such removal or remediation is expressly identified in the Contract Documents to be within the scope of the Work.

D. Contractor shall be responsible for controlling, containing, and duly removing all Constituents of Concern brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible, and for any associated costs; and for the costs of removing and remediating any Hazardous Environmental Condition created by the presence of any such Constituents of Concern.

E. If Contractor encounters, uncovers, or reveals a Hazardous Environmental Condition whose removal or remediation is not expressly identified in the Contract Documents as being within the scope of the Work, or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, then Contractor shall immediately: (1) secure or otherwise isolate such condition; (2) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 7.15); and (3) 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. Promptly after consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 5.06.F. If Contractor or anyone for whom Contractor is responsible created the Hazardous Environmental Condition in question, then Owner may remove and remediate the Hazardous Environmental Condition, and impose a set-off against payments to account for the associated costs.

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F. Contractor shall not resume Work in connection with such Hazardous Environmental Condition or in any affected area until after Owner has obtained any required permits related thereto, and delivered written notice to Contractor either (1) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (2) specifying any special conditions under which such Work may be resumed safely.

G. 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, then within 30 days of Owner's written notice regarding the resumption of Work, Contractor may submit a Change Proposal, or Owner may impose a set-off.

H. 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, following the contractual change procedures in Article 11. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 8.

I. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, 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 (1) was not shown or indicated in the Drawings, Specifications, or other Contract Documents, identified as Technical Data entitled to limited reliance pursuant to Paragraph 5.06.B, or identified in the Contract Documents to be included within the scope of the Work, and (2) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.H shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

J. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 failure to control, contain, or remove a Constituent of Concern brought to the Site by Contractor or by anyone for whom Contractor is responsible, or to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 5.06.J shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

K. The provisions of Paragraphs 5.03, 5.04, and 5.05 do not apply to the presence of Constituents of Concern or to a Hazardous Environmental Condition uncovered or revealed at the Site.

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ARTICLE 6 – BONDS AND INSURANCE

6.01 *Performance, Payment, and Other Bonds*

A. Contractor shall furnish a performance bond and a payment bond, 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. 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 15.08, whichever is later, except as provided otherwise by Laws or Regulations, the Supplementary Conditions, or other specific provisions of the Contract. Contractor shall also furnish such other bonds as are required by the Supplementary Conditions or other specific provisions of the Contract.

B. All bonds shall be in the form prescribed by the Contract except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (as amended and supplemented) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. A bond signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed the accompanying bond.

C. Contractor shall obtain the required bonds from surety companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue bonds in the required amounts.

D. If the surety on a bond furnished by Contractor is declared bankrupt or becomes insolvent, or its right to do business is terminated in any state or jurisdiction where any part of the Project is located, or the surety ceases to meet the requirements above, then 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 bond and surety requirements above.

E. If Contractor has failed to obtain a required bond, Owner may exclude the Contractor from the Site and exercise Owner's termination rights under Article 16.

F. Upon request, Owner shall provide a copy of the payment bond to any Subcontractor, Supplier, or other person or entity claiming to have furnished labor or materials used in the performance of the Work.

6.02 *Insurance—General Provisions*

A. Owner and Contractor shall obtain and maintain insurance as required in this Article and in the Supplementary Conditions.

B. All insurance required by the Contract to be purchased and maintained by Owner or Contractor shall be obtained from insurance companies that are duly licensed or authorized, in the state or jurisdiction in which the Project is located, to issue insurance policies for the required limits and coverages. Unless a different standard is indicated in the Supplementary Conditions, all companies that provide insurance policies required under this Contract shall have an A.M. Best rating of A-VII or better.

C. Contractor shall deliver to Owner, with copies to each named insured and additional insured (as identified in this Article, in the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Contractor has obtained and is

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maintaining the policies, coverages, and endorsements required by the Contract. Upon request by Owner or any other insured, Contractor shall also furnish other evidence of such required insurance, including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Contractor may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

D. Owner shall deliver to Contractor, with copies to each named insured and additional insured (as identified in this Article, the Supplementary Conditions, or elsewhere in the Contract), certificates of insurance establishing that Owner has obtained and is maintaining the policies, coverages, and endorsements required of Owner by the Contract (if any). Upon request by Contractor or any other insured, Owner shall also provide other evidence of such required insurance (if any), including but not limited to copies of policies and endorsements, and documentation of applicable self-insured retentions and deductibles. Owner may block out (redact) any confidential premium or pricing information contained in any policy or endorsement furnished under this provision.

E. Failure of Owner or Contractor to demand such certificates or other evidence of the other party's full compliance with these insurance requirements, or failure of Owner or Contractor to identify a deficiency in compliance from the evidence provided, shall not be construed as a waiver of the other party's obligation to obtain and maintain such insurance.

F. If either party does not purchase or maintain all of the insurance required of such party by the Contract, 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.

G. If Contractor has failed to obtain and maintain required insurance, Owner may exclude the Contractor from the Site, impose an appropriate set-off against payment, and exercise Owner's termination rights under Article 16.

H. Without prejudice to any other right or remedy, if a party has failed to obtain required insurance, the other party may elect to obtain equivalent insurance to protect such other party's interests at the expense of the party who was required to provide such coverage, and the Contract Price shall be adjusted accordingly.

I. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor or Contractor's interests.

J. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner and other individuals and entities in the Contract.

6.03 *Contractor's Insurance*

A. *Workers' Compensation*: Contractor shall purchase and maintain workers' compensation and employer's liability insurance for:

1. claims under workers' compensation, disability benefits, and other similar employee benefit acts.

2. United States Longshoreman and Harbor Workers' Compensation Act and Jones Act coverage (if applicable).

3. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees (by stop-gap endorsement in monopolist worker's compensation states).

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4. Foreign voluntary worker compensation (if applicable).

B. *Commercial General Liability—Claims Covered*: Contractor shall purchase and maintain commercial general liability insurance, covering all operations by or on behalf of Contractor, on an occurrence basis, against:

1. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees.

2. claims for damages insured by reasonably available personal injury liability coverage.

3. 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.

C. *Commercial General Liability—Form and Content*: Contractor's commercial liability policy shall be written on a 1996 (or later) ISO commercial general liability form (occurrence form) and include the following coverages and endorsements:

1. Products and completed operations coverage:

a. Such insurance shall be maintained for three years after final payment.

b. Contractor shall furnish Owner and each other additional insured (as identified in the Supplementary Conditions or elsewhere in the Contract) evidence of continuation of such insurance at final payment and three years thereafter.

2. Blanket contractual liability coverage, to the extent permitted by law, including but not limited to coverage of Contractor's contractual indemnity obligations in Paragraph 7.18.

3. Broad form property damage coverage.

4. Severability of interest.

5. Underground, explosion, and collapse coverage.

6. Personal injury coverage.

7. Additional insured endorsements that include both ongoing operations and products and completed operations coverage through ISO Endorsements CG 20 10 10 01 and CG 20 37 10 01 (together); or CG 20 10 07 04 and CG 20 37 07 04 (together); or their equivalent.

8. For design professional additional insureds, ISO Endorsement CG 20 32 07 04, "Additional Insured—Engineers, Architects or Surveyors Not Engaged by the Named Insured" or its equivalent.

D. *Automobile liability*: Contractor shall purchase and maintain automobile liability insurance against 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. The automobile liability policy shall be written on an occurrence basis.

E. *Umbrella or excess liability*: Contractor shall purchase and maintain umbrella or excess liability insurance written over the underlying employer's liability, commercial general liability, and automobile liability insurance described in the paragraphs above. Subject to industry-standard exclusions, the coverage afforded shall follow form as to each and every one of the underlying policies.

F. *Contractor's pollution liability insurance*: Contractor shall purchase and maintain a policy covering third-party injury and property damage claims, including clean-up costs, as a result

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of pollution conditions arising from Contractor's operations and completed operations. This insurance shall be maintained for no less than three years after final completion.

G. *Additional insureds*: The Contractor's commercial general liability, automobile liability, umbrella or excess, and pollution liability policies shall include and list as additional insureds Owner and Engineer, and any individuals or entities identified in the Supplementary Conditions; include coverage for the respective officers, directors, members, 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 (including as applicable those arising from both ongoing and completed operations) on a non-contributory basis. Contractor shall obtain all necessary endorsements to support these requirements.

H. *Contractor's professional liability insurance*: If Contractor will provide or furnish professional services under this Contract, through a delegation of professional design services or otherwise, then Contractor shall be responsible for purchasing and maintaining applicable professional liability insurance. This insurance shall provide protection against claims arising out of performance of professional design or related services, and caused by a negligent error, omission, or act for which the insured party is legally liable. It shall be maintained throughout the duration of the Contract and for a minimum of two years after Substantial Completion. If such professional design services are performed by a Subcontractor, and not by Contractor itself, then the requirements of this paragraph may be satisfied through the purchasing and maintenance of such insurance by such Subcontractor.

I. *General provisions*: The policies of insurance required by this Paragraph 6.03 shall:

1. include at least the specific coverages provided in this Article.

2. be written for not less than the limits of liability provided in this Article and in the Supplementary Conditions, or required by Laws or Regulations, whichever is greater.

3. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed, or renewal refused until at least 10 days prior written notice has been given to Contractor. Within three days of receipt of any such written notice, Contractor shall provide a copy of the notice to Owner, Engineer, and each other insured under the policy.

4. remain in effect at least until final payment (and longer if expressly required in this Article) and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work as a warranty or correction obligation, or otherwise, or returning to the Site to conduct other tasks arising from the Contract Documents.

5. be appropriate for the Work being performed and provide protection from claims that 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.

J. The coverage requirements for specific policies of insurance must be met by such policies, and not by reference to excess or umbrella insurance provided in other policies.

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6.04 *Owner's Liability Insurance*

A. In addition to the insurance required to be provided by Contractor under Paragraph 6.03, 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.

B. Owner's liability policies, if any, operate separately and independently from policies required to be provided by Contractor, and Contractor cannot rely upon Owner's liability policies for any of Contractor's obligations to the Owner, Engineer, or third parties.

6.05 *Property Insurance*

A. *Builder's Risk*: Unless otherwise provided in the Supplementary Conditions, Contractor shall purchase and maintain builder's risk insurance upon the Work on a completed value basis, in the amount of the full insurable 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 Owner and Contractor as named insureds, and all Subcontractors, and any individuals or entities required by the Supplementary Conditions to be insured under such builder's risk policy, as insureds or named insureds. For purposes of the remainder of this Paragraph 6.05, Paragraphs 6.06 and 6.07, and any corresponding Supplementary Conditions, the parties required to be insured shall collectively be referred to as "insureds."

2. be written on a builder's risk "all risk" policy form that shall at least include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire; lightning; windstorm; riot; civil commotion; terrorism; vehicle impact; aircraft; smoke; theft; vandalism and malicious mischief; mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; flood; collapse; explosion; debris removal; demolition occasioned by enforcement of Laws and Regulations; water damage (other than that caused by flood); and such other perils or causes of loss as may be specifically required by the Supplementary Conditions. If insurance against mechanical breakdown, boiler explosion, and artificially generated electric current; earthquake; volcanic activity, and other earth movement; or flood, are not commercially available under builder's risk policies, by endorsement or otherwise, such insurance may be provided through other insurance policies acceptable to Owner and Contractor.

3. cover, as insured property, at least the following: (a) the Work and all materials, supplies, machinery, apparatus, equipment, fixtures, and other property of a similar nature that are to be incorporated into or used in the preparation, fabrication, construction, erection, or completion of the Work, including Owner-furnished or assigned property; (b) spare parts inventory required within the scope of the Contract; and (c) temporary works which are not intended to form part of the permanent constructed Work but which are intended to provide working access to the Site, or to the Work under construction, or which are intended to provide temporary support for the Work under construction, including scaffolding, form work, fences, shoring, falsework, and temporary structures.

4. cover expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects).

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5. extend to cover damage or loss to insured property while in temporary storage at the Site or in a storage location outside the Site (but not including property stored at the premises of a manufacturer or Supplier).

6. extend to cover damage or loss to insured property while in transit.

7. allow for partial occupation or use of the Work by Owner, such that those portions of the Work that are not yet occupied or used by Owner shall remain covered by the builder's risk insurance.

8. allow for the waiver of the insurer's subrogation rights, as set forth below.

9. provide primary coverage for all losses and damages caused by the perils or causes of loss covered.

10. not include a co-insurance clause.

11. include an exception for ensuing losses from physical damage or loss with respect to any defective workmanship, design, or materials exclusions.

12. include performance/hot testing and start-up.

13. be maintained in effect, subject to the provisions herein regarding Substantial Completion and partial occupancy or use of the Work by Owner, until the Work is complete.

B. *Notice of Cancellation or Change*: All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 6.05 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 10 days prior written notice has been given to the purchasing policyholder. Within three days of receipt of any such written notice, the purchasing policyholder shall provide a copy of the notice to each other insured.

C. *Deductibles*: The purchaser of any required builder's risk or property insurance shall pay for costs not covered because of the application of a policy deductible.

D. *Partial Occupancy or Use by Owner*: If Owner will occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 15.04, then Owner (directly, if it is the purchaser of the builder's risk policy, or through Contractor) will provide notice of such occupancy or use to the builder's risk insurer. The builder's risk insurance shall not be canceled or permitted to lapse on account of any such partial use or occupancy; rather, those portions of the Work that are occupied or used by Owner may come off the builder's risk policy, while those portions of the Work not yet occupied or used by Owner shall remain covered by the builder's risk insurance.

E. *Additional Insurance*: If Contractor elects to obtain other special insurance to be included in or supplement the builder's risk or property insurance policies provided under this Paragraph 6.05, it may do so at Contractor's expense.

F. *Insurance of Other Property*: If the express insurance provisions of the Contract do not require or address the insurance of a property item or interest, such as tools, construction equipment, or other personal property owned by Contractor, a Subcontractor, or an employee of Contractor or a Subcontractor, then the entity or individual owning such property item will be responsible for deciding whether to insure it, and if so in what amount.

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6.06 *Waiver of Rights*

A. All policies purchased in accordance with Paragraph 6.05, expressly including the builder's risk policy, 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 insureds thereunder, or against Engineer or its consultants, or their officers, directors, members, partners, employees, agents, consultants, or subcontractors. Owner and Contractor waive all rights against each other and the respective officers, directors, members, 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 Engineer, its consultants, all Subcontractors, all individuals or entities identified in the Supplementary Conditions as insureds, and the officers, directors, members, 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 or Contractor as trustee or fiduciary, or otherwise payable under any policy so issued.

B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, 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 occupancy or use pursuant to Paragraph 15.04, after Substantial Completion pursuant to Paragraph 15.03, or after final payment pursuant to Paragraph 15.06.

C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 6.06.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, or the officers, directors, members, partners, employees, agents, consultants, or subcontractors of each and any of them.

D. Contractor shall be responsible for assuring that the agreement under which a Subcontractor performs a portion of the Work contains provisions whereby the Subcontractor waives all rights against Owner, Contractor, all individuals or entities identified in the Supplementary Conditions as insureds, the Engineer and its consultants, and the officers, directors, members, 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 builder's risk insurance and any other property insurance applicable to the Work.

6.07 *Receipt and Application of Property Insurance Proceeds*

A. Any insured loss under the builder's risk and other policies of insurance required by Paragraph 6.05 will be adjusted and settled with the named insured that purchased the

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policy. Such named insured shall act as fiduciary for the other insureds, and give notice to such other insureds that adjustment and settlement of a claim is in progress. Any other insured may state its position regarding a claim for insured loss in writing within 15 days after notice of such claim.

B. Proceeds for such insured losses may be made payable by the insurer either jointly to multiple insureds, or to the named insured that purchased the policy in its own right and as fiduciary for other insureds, subject to the requirements of any applicable mortgage clause. A named insured receiving insurance proceeds under the builder's risk and other policies of insurance required by Paragraph 6.05 shall distribute such proceeds in accordance with such agreement as the parties in interest may reach, or as otherwise required under the dispute resolution provisions of this Contract or applicable Laws and Regulations.

C. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the money so received applied on account thereof, and the Work and the cost thereof covered by Change Order, if needed.

ARTICLE 7 – CONTRACTOR'S RESPONSIBILITIES

7.01 *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.

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.

7.02 *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, Monday through Friday. Contractor will not perform Work on a Saturday, Sunday, or any legal holiday. Contractor may perform Work outside regular working hours or on Saturdays, Sundays, or legal holidays only with Owner's written consent, which will not be unreasonably withheld.

7.03 *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, whether or not such items are specifically called for in the Contract Documents.

B. All materials and equipment incorporated into the Work shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and

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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.

7.04 *"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 Contract Price has been based upon Contractor furnishing such item as specified. The specification or description of such an item 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 is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment, or items from other proposed suppliers under the circumstances described below.

1. If Engineer in its sole discretion determines that 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, Engineer shall deem it an "or equal" item. For the purposes of this paragraph, 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

4) it is not objectionable to Owner.

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.

B. *Contractor's Expense*: Contractor shall provide all data in support of any proposed "or equal" item at Contractor's expense.

C. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each "or-equal" request. Engineer may require Contractor to furnish additional data about the proposed "or-equal" item. Engineer will be the sole judge of acceptability. No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an approved Shop Drawing or other written communication. Engineer will advise Contractor in writing of any negative determination.

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D. *Effect of Engineer's Determination*: Neither approval nor denial of an "or-equal" request shall result in any change in Contract Price. The Engineer's denial of an "or-equal" request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents.

E. *Treatment as a Substitution Request*: If Engineer determines that an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item, Contractor may request that Engineer considered the proposed item as a substitute pursuant to Paragraph 7.05.

7.05 *Substitutes*

A. Unless the specification or description of an item of material or equipment required to be furnished under the Contract Documents contains or is followed by words reading that no substitution is permitted, Contractor may request that Engineer authorize the use of other items of material or equipment under the circumstances described below. To the extent possible such requests shall be made before commencement of related construction at the Site.

1. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is functionally equivalent to that named and an acceptable substitute therefor. Engineer will not accept requests for review of proposed substitute items of material or equipment from anyone other than Contractor.

2. The requirements for review by Engineer will be as set forth in Paragraph 7.05.B, as supplemented by the Specifications, and as Engineer may decide is appropriate under the circumstances.

3. 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:

a. shall certify that the proposed substitute item will:

1) perform adequately the functions and achieve the results called for by the general design,

2) be similar in substance to that specified, and

3) be suited to the same use as that specified.

b. will state:

1) the extent, if any, to which the use of the proposed substitute item will necessitate a change in Contract Times,

2) whether 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

3) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty.

c. will identify:

1) all variations of the proposed substitute item from that specified, and

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2) available engineering, sales, maintenance, repair, and replacement services.

d. shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including but not limited to changes in Contract Price, shared savings, costs of redesign, and claims of other contractors affected by any resulting change.

B. *Engineer's Evaluation and Determination*: Engineer will be allowed a reasonable time to evaluate each substitute request, and to obtain comments and direction from Owner. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole judge of acceptability. No substitute will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an acceptable substitute. Engineer's determination will be evidenced by a Field Order or a proposed Change Order accounting for the substitution itself and all related impacts, including changes in Contract Price or Contract Times. Engineer will advise Contractor in writing of any negative determination.

C. *Special Guarantee*: Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

D. *Reimbursement of Engineer's Cost*: Engineer will record Engineer's costs in evaluating a substitute proposed or submitted by Contractor. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable 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.

E. *Contractor's Expense*: Contractor shall provide all data in support of any proposed substitute at Contractor's expense.

F. *Effect of Engineer's Determination*: If Engineer approves the substitution request, Contractor shall execute the proposed Change Order and proceed with the substitution. The Engineer's denial of a substitution request shall be final and binding, and may not be reversed through an appeal under any provision of the Contract Documents. Contractor may challenge the scope of reimbursement costs imposed under Paragraph 7.05.D, by timely submittal of a Change Proposal.

7.06 *Concerning Subcontractors, Suppliers, and Others*

A. Contractor may retain Subcontractors and Suppliers for the performance of parts of the Work. Such Subcontractors and Suppliers must be acceptable to Owner.

B. Contractor shall retain specific Subcontractors, Suppliers, or other individuals or entities for the performance of designated parts of the Work if required by the Contract to do so.

C. Subsequent to the submittal of Contractor's Bid or final negotiation of the terms of the Contract, Owner may not require Contractor to retain any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against which Contractor has reasonable objection.

D. Prior to entry into any binding subcontract or purchase order, Contractor shall submit to Owner the identity of the proposed Subcontractor or Supplier (unless Owner has already deemed such proposed Subcontractor or Supplier acceptable, during the bidding process or otherwise). Such proposed Subcontractor or Supplier shall be deemed acceptable to Owner unless Owner raises a substantive, reasonable objection within five days.

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E. Owner may require the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work. Owner also may require Contractor to retain specific replacements; provided, however, that Owner may not require a replacement to which Contractor has a reasonable objection. If Contractor has submitted the identity of certain Subcontractors, Suppliers, or other individuals or entities for acceptance by Owner, and Owner has accepted it (either in writing or by failing to make written objection thereto), then Owner may subsequently revoke the acceptance of any such Subcontractor, Supplier, or other individual or entity so identified solely on the basis of substantive, reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity.

F. If Owner requires the replacement of any Subcontractor, Supplier, or other individual or entity retained by Contractor to perform any part of the Work, then Contractor shall be entitled to an adjustment in Contract Price or Contract Times, or both, with respect to the replacement; and Contractor shall initiate a Change Proposal for such adjustment within 30 days of Owner's requirement of replacement.

G. 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 the right of Owner to the completion of the Work in accordance with the Contract Documents.

H. On a monthly basis Contractor shall submit to Engineer a complete list of all Subcontractors and Suppliers having a direct contract with Contractor, and of all other Subcontractors and Suppliers known to Contractor at the time of submittal.

I. 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.

J. Contractor shall be solely responsible for scheduling and coordinating the work of Subcontractors, Suppliers, and all other individuals or entities performing or furnishing any of the Work.

K. Contractor shall restrict all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work from communicating with Engineer or Owner, except through Contractor or in case of an emergency, or as otherwise expressly allowed herein.

L. 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.

M. All Work performed for Contractor by a Subcontractor or Supplier shall be pursuant to an appropriate contractual agreement that specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer.

N. Owner may furnish to any Subcontractor or Supplier, to the extent practicable, information about amounts paid to Contractor on account of Work performed for Contractor by the particular Subcontractor or Supplier.

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O. 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 create any obligation on the part of Owner or Engineer to pay or to see to the payment of any money due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.

7.07 *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, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors 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 specified in the Contract Documents, but not identified as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.

C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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.

7.08 *Permits*

A. Unless otherwise provided in the Contract Documents, 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 the submission of Contractor's Bid (or when Contractor became bound under a negotiated contract). Owner shall pay all charges of utility owners for connections for providing permanent service to the Work

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7.09 *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.

7.10 *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 or takes any other action knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all resulting costs and losses, and shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 such Work or other action. It shall not be Contractor's responsibility to make certain that the Work described in the Contract Documents is in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

C. Owner or Contractor may give notice to the other party of any changes after the submission of Contractor's Bid (or after the date when Contractor became bound under a negotiated contract) in Laws or Regulations having an effect on the cost or time of performance of the Work, including but not limited to changes in Laws or Regulations having an effect on procuring permits and on sales, use, value-added, consumption, and other similar taxes. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times resulting from such changes, then within 30 days of such notice Contractor may submit a Change Proposal, or Owner may initiate a Claim.

7.11 *Record Documents*

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

7.12 *Safety and Protection*

A. Contractor shall be solely responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. 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;

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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, other work in progress, 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 Owner; the owners of adjacent property, Underground Facilities, and other utilities; and other contractors and utility owners performing work at or adjacent to the Site, when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property or work in progress.

C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.

D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.

E. All damage, injury, or loss to any property referred to in Paragraph 7.12.A.2 or 7.12.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 at its expense (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer 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).

F. Contractor's duties and responsibilities for safety and protection 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 15.06.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

G. Contractor's duties and responsibilities for safety and protection shall resume whenever Contractor or any Subcontractor or Supplier returns to the Site to fulfill warranty or correction obligations, or to conduct other tasks arising from the Contract Documents.

7.13 *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.

7.14 *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

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exchanged between or among employers at the Site in accordance with Laws or Regulations.

7.15 *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.

7.16 *Shop Drawings, Samples, and Other Submittals*

A. *Shop Drawing and Sample Submittal Requirements*:

1. Before submitting a Shop Drawing or Sample, Contractor shall have:

a. reviewed and coordinated the Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;

b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;

c. determined and verified the suitability of all materials and equipment offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and

d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.

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 of that submittal, and that Contractor approves the 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 set forth in a written communication separate from the Shop Drawings or Sample submittal; and, in addition, in the case of Shop Drawings by a specific notation made on each Shop Drawing submitted to Engineer for review and approval of each such variation.

B. *Submittal Procedures for Shop Drawings and Samples*: Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals. Each submittal will be identified as Engineer may require.

1. *Shop Drawings*:

a. Contractor shall submit the number of copies required in the Specifications.

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

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provide and to enable Engineer to review the information for the limited purposes required by Paragraph 7.16.D.

2. *Samples*:

   a. Contractor shall submit the number of Samples required in the Specifications.

   b. Contractor shall 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 7.16.D.

3. 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. *Other Submittals*: Contractor shall submit other submittals to Engineer in accordance with the accepted Schedule of Submittals, and pursuant to the applicable terms of the Specifications.

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 or to safety precautions or programs incident thereto.

3. Engineer's review and approval of a separate item as such will not indicate approval of the assembly in which the item functions.

4. Engineer's review and approval of a Shop Drawing or Sample 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 7.16.A.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 will document any such approved variation from the requirements of the Contract Documents in a Field Order.

5. Engineer's review and approval of a Shop Drawing or Sample shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 7.16.A and B.

6. Engineer's review and approval of a Shop Drawing or Sample, or of a variation from the requirements of the Contract Documents, shall not, under any circumstances, change the Contract Times or Contract Price, unless such changes are included in a Change Order.

7. Neither Engineer's receipt, review, acceptance or approval of a Shop Drawing, Sample, or other submittal shall result in such item becoming a Contract Document.

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8. Contractor shall perform the Work in compliance with the requirements and commitments set forth in approved Shop Drawings and Samples, subject to the provisions of Paragraph 7.16.D.4.

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.

2. Contractor shall furnish required submittals with sufficient information and accuracy to obtain required approval of an item with no more than three submittals. Engineer will record Engineer's time for reviewing a fourth or subsequent submittal of a Shop Drawings, sample, or other item requiring approval, and Contractor shall be responsible for Engineer's charges to Owner for such time. Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges.

3. If Contractor requests a change of a previously approved submittal item, Contractor shall be responsible for Engineer's charges to Owner for its review time, and Owner may impose a set-off against payments due to Contractor to secure reimbursement for such charges, unless the need for such change is beyond the control of Contractor.

7.17 *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 officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on 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;

6. the issuance of a notice of acceptability by Engineer;

7. any inspection, test, or approval by others; or

8. any correction of defective Work by Owner.

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D. If the Contract requires the Contractor to accept the assignment of a contract entered into by Owner, then the specific warranties, guarantees, and correction obligations contained in the assigned contract shall govern with respect to Contractor's performance obligations to Owner for the Work described in the assigned contract.

7.18 *Indemnification*

A. To the fullest extent permitted by Laws and Regulations, and in addition to any other obligations of Contractor under the Contract or otherwise, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, 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 officers, directors, members, partners, employees, agents, consultants, or subcontractors 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 7.18.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 7.18.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, 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.

7.19 *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 Laws and Regulations.

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, and other submittals prepared by such professional. Shop

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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, 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 7.16.D.1.

E. Contractor shall not be responsible for the adequacy of the performance or design criteria specified by Owner or Engineer.

ARTICLE 8 – OTHER WORK AT THE SITE

8.01 *Other Work*

A. In addition to and apart from the Work under the Contract Documents, the Owner may perform other work at or adjacent to the Site. Such other work may be performed by Owner's employees, or through contracts between the Owner and third parties. Owner may also arrange to have third-party utility owners perform work on their utilities and facilities at or adjacent to the Site.

B. If Owner performs other work at or adjacent to the Site with Owner's employees, or through contracts for such other work, then Owner shall give Contractor written notice thereof prior to starting any such other work. If Owner has advance information regarding the start of any utility work at or adjacent to the Site, Owner shall provide such information to Contractor.

C. Contractor shall afford each other contractor that performs such other work, each utility owner performing other work, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, and provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work. 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 such work; provided, however, that Contractor may cut or alter others' work with the written consent of Engineer and the others whose work will be affected.

D. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 8, 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.

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8.02 *Coordination*

A. If Owner intends to contract with others for the performance of other work at or adjacent to the Site, to perform other work at or adjacent to the Site with Owner's employees, or to arrange to have utility owners perform work at or adjacent to the Site, the following will be set forth in the Supplementary Conditions or provided to Contractor prior to the start of any such other work:

1. the identity of the individual or entity that will have authority and responsibility for coordination of the activities among the various contractors;

2. an itemization of the specific matters to be covered by such authority and responsibility; and

3. the extent of such authority and responsibilities.

B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

8.03 *Legal Relationships*

A. If, in the course of performing other work at or adjacent to the Site for Owner, the Owner's employees, any other contractor working for Owner, or any utility owner causes damage to the Work or to the property of Contractor or its Subcontractors, or delays, disrupts, interferes with, or increases the scope or cost of the performance of the Work, through actions or inaction, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor must submit any Change Proposal seeking an equitable adjustment in the Contract Price or the Contract Times under this paragraph within 30 days of the damaging, delaying, disrupting, or interfering event. The entitlement to, and extent of, any such equitable adjustment shall take into account information (if any) regarding such other work that was provided to Contractor in the Contract Documents prior to the submittal of the Bid or the final negotiation of the terms of the Contract. When applicable, any such equitable adjustment in Contract Price shall be conditioned on Contractor assigning to Owner all Contractor's rights against such other contractor or utility owner with respect to the damage, delay, disruption, or interference that is the subject of the adjustment. 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.

B. Contractor shall take reasonable and customary measures to avoid damaging, delaying, disrupting, or interfering with the work of Owner, any other contractor, or any utility owner performing other work at or adjacent to the Site. If Contractor fails to take such measures and as a result damages, delays, disrupts, or interferes with the work of any such other contractor or utility owner, then Owner may impose a set-off against payments due to Contractor, and assign to such other contractor or utility owner the Owner's contractual rights against Contractor with respect to the breach of the obligations set forth in this paragraph.

C. When Owner is performing other work at or adjacent to the Site with Owner's employees, Contractor shall be liable to Owner for damage to such other work, and for the reasonable direct delay, disruption, and interference costs incurred by Owner as a result of Contractor's failure to take reasonable and customary measures with respect to Owner's other work. In response to such damage, delay, disruption, or interference, Owner may impose a set-off against payments due to Contractor.

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D. If Contractor damages, delays, disrupts, or interferes with the work of any other contractor, or any utility owner performing other work at or adjacent to the Site, through Contractor's failure to take reasonable and customary measures to avoid such impacts, or if any claim arising out of Contractor's actions, inactions, or negligence in performance of the Work at or adjacent to the Site is made by any such other contractor or utility owner against Contractor, Owner, or Engineer, then Contractor shall (1) promptly attempt to settle the claim as to all parties through negotiations with such other contractor or utility owner, or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law, and (2) indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them from and against any such claims, and against all 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 damage, delay, disruption, or interference.

ARTICLE 9 – OWNER'S RESPONSIBILITIES

9.01 *Communications to Contractor*

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

9.02 *Replacement of Engineer*

A. Owner may at its discretion appoint an engineer to replace Engineer, provided Contractor makes no reasonable objection to the replacement engineer. The replacement engineer's status under the Contract Documents shall be that of the former Engineer.

9.03 *Furnish Data*

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

9.04 *Pay When Due*

A. Owner shall make payments to Contractor when they are due as provided in the Agreement.

9.05 *Lands and Easements; Reports, Tests, and Drawings*

A. Owner's duties with respect to providing lands and easements are set forth in Paragraph 5.01.

B. Owner's duties with respect to providing engineering surveys to establish reference points are set forth in Paragraph 4.03.

C. Article 5 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of conditions at the Site, and drawings of physical conditions relating to existing surface or subsurface structures at the Site.

9.06 *Insurance*

A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 6.

9.07 *Change Orders*

A. Owner's responsibilities with respect to Change Orders are set forth in Article 11.

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9.08 *Inspections, Tests, and Approvals*

A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 14.02.B.

9.09 *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.

9.10 *Undisclosed Hazardous Environmental Condition*

A. Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 5.06.

9.11 *Evidence of Financial Arrangements*

A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents (including obligations under proposed changes in the Work).

9.12 *Safety Programs*

A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed.

B. Owner shall furnish copies of any applicable Owner safety programs to Contractor.

ARTICLE 10 – ENGINEER'S STATUS DURING CONSTRUCTION

10.01 *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.

10.02 *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 10.08. Particularly, but without limitation, during

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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.

10.03 *Project Representative*

A. If Owner and Engineer have agreed that Engineer will furnish a Resident Project Representative to represent Engineer at the Site and assist Engineer in observing the progress and quality of the Work, then the authority and responsibilities of any such Resident Project Representative will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph 10.08. 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.

10.04 *Rejecting Defective Work*

A. Engineer has the authority to reject Work in accordance with Article 14.

10.05 *Shop Drawings, Change Orders and Payments*

A. Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, are set forth in Paragraph 7.16.

B. 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, are set forth in Paragraph 7.19.

C. Engineer's authority as to Change Orders is set forth in Article 11.

D. Engineer's authority as to Applications for Payment is set forth in Article 15.

10.06 *Determinations for Unit Price Work*

A. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor as set forth in Paragraph 13.03.

10.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

A. Engineer will render decisions regarding the requirements of the Contract Documents, and judge the acceptability of the Work, pursuant to the specific procedures set forth herein for initial interpretations, Change Proposals, and acceptance of the Work. In rendering such decisions and judgments, Engineer will not show partiality to Owner or Contractor, and will not be liable to Owner, Contractor, or others in connection with any proceedings, interpretations, decisions, or judgments conducted or rendered in good faith.

10.08 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 10 or under any other provision of the Contract, 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.

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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 15.06.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 10.08 shall also apply to the Resident Project Representative, if any.

10.09 *Compliance with Safety Program*

A. While at the Site, Engineer's employees and representatives will comply with the specific applicable requirements of Owner's and Contractor's safety programs (if any) of which Engineer has been informed.

ARTICLE 11 – AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK

11.01 *Amending and Supplementing Contract Documents*

A. The Contract Documents may be amended or supplemented by a Change Order, a Work Change Directive, or a Field Order.

1. *Change Orders*:

a. If an amendment or supplement to the Contract Documents includes a change in the Contract Price or the Contract Times, such amendment or supplement must be set forth in a Change Order. A Change Order also may be used to establish amendments and supplements of the Contract Documents that do not affect the Contract Price or Contract Times.

b. Owner and Contractor may amend those terms and conditions of the Contract Documents that do not involve (1) the performance or acceptability of the Work, (2) the design (as set forth in the Drawings, Specifications, or otherwise), or (3) other engineering or technical matters, without the recommendation of the Engineer. Such an amendment shall be set forth in a Change Order.

2. *Work Change Directives*: A Work Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the modification ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order, following negotiations by the parties as to the Work Change Directive's effect, if any, on the Contract Price and Contract Times; or, if negotiations are unsuccessful, by a determination under the terms of the Contract Documents governing adjustments, expressly including Paragraph 11.04 regarding change of Contract Price. Contractor must submit any Change Proposal seeking an

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adjustment of the Contract Price or the Contract Times, or both, no later than 30 days after the completion of the Work set out in the Work Change Directive. Owner must submit any Claim seeking an adjustment of the Contract Price or the Contract Times, or both, no later than 60 days after issuance of the Work Change Directive.

3. *Field Orders*: Engineer may authorize minor changes in the Work if the changes 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. Such changes will be accomplished by a Field Order and will be binding on Owner and also on Contractor, which shall perform the Work involved promptly. If Contractor believes that a Field Order justifies an adjustment in the Contract Price or Contract Times, or both, then before proceeding with the Work at issue, Contractor shall submit a Change Proposal as provided herein.

11.02 *Owner-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. Such changes shall be supported by Engineer's recommendation, to the extent the change involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters. Such changes may be accomplished by a Change Order, if Owner and Contractor have agreed as to the effect, if any, of the changes on Contract Times or Contract Price; or by a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved; or, in the case of a deletion in the Work, promptly cease construction activities with respect to such deleted Work. Added or revised Work shall be performed under the applicable conditions of the Contract Documents. Nothing in this paragraph shall obligate Contractor to undertake work that Contractor reasonably concludes cannot be performed in a manner consistent with Contractor's safety obligations under the Contract Documents or Laws and Regulations.

11.03 *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, except in the case of an emergency as provided in Paragraph 7.15 or in the case of uncovering Work as provided in Paragraph 14.05.

11.04 *Change of Contract Price*

A. The Contract Price may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Price shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment of Contract Price shall comply with the provisions of Article 12.

B. 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, then by application of such unit prices to the quantities of the items involved (subject to the provisions of Paragraph 13.03); or

2. where the Work involved is not covered by unit prices contained in the Contract Documents, then by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.04.C.2); or

3. where the Work involved is not covered by unit prices contained in the Contract Documents and the parties do not reach mutual agreement to a lump sum, then on

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the basis of the Cost of the Work (determined as provided in Paragraph 13.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 11.04.C).

C. *Contractor's Fee*: When applicable, 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 13.01.B.1 and 13.01.B.2, the Contractor's fee shall be 15 percent;

b. for costs incurred under Paragraph 13.01.B.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 Paragraphs 11.01.C.2.a and 11.01.C.2.b is that the Contractor's fee shall be based on: (1) a fee of 15 percent of the costs incurred under Paragraphs 13.01.A.1 and 13.01.A.2 by the Subcontractor that actually performs the Work, at whatever tier, and (2) with respect to Contractor itself and to any Subcontractors of a tier higher than that of the Subcontractor that actually performs the Work, a fee of five percent of the amount (fee plus underlying costs incurred) attributable to the next lower tier Subcontractor; provided, however, that for any such subcontracted work the maximum total fee to be paid by Owner shall be no greater than 27 percent of the costs incurred by the Subcontractor that actually performs the work;

d. no fee shall be payable on the basis of costs itemized under Paragraphs 13.01.B.4, 13.01.B.5, and 13.01.C;

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 11.04.C.2.a through 11.04.C.2.e, inclusive.

11.05 *Change of Contract Times*

A. The Contract Times may only be changed by a Change Order. Any Change Proposal for an adjustment in the Contract Times shall comply with the provisions of Paragraph 11.06. Any Claim for an adjustment in the Contract Times shall comply with the provisions of Article 12.

B. An adjustment of the Contract Times shall be subject to the limitations set forth in Paragraph 4.05, concerning delays in Contractor's progress.

11.06 *Change Proposals*

A. Contractor shall submit a Change Proposal to Engineer to request an adjustment in the Contract Times or Contract Price; appeal an initial decision by Engineer concerning the requirements of the Contract Documents or relating to the acceptability of the Work under the Contract Documents; contest a set-off against payment due; or seek other relief under

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the Contract. The Change Proposal shall specify any proposed change in Contract Times or Contract Price, or both, or other proposed relief, and explain the reason for the proposed change, with citations to any governing or applicable provisions of the Contract Documents.

1. *Procedures*: Contractor shall submit each Change Proposal to Engineer promptly (but in no event later than 30 days) after the start of the event giving rise thereto, or after such initial decision. The Contractor shall submit supporting data, including the proposed change in Contract Price or Contract Time (if any), to the Engineer and Owner within 15 days after the submittal of the Change Proposal. The supporting data shall be accompanied by a written statement that the supporting data are accurate and complete, and that any requested time or price adjustment is the entire adjustment to which Contractor believes it is entitled as a result of said event. Engineer will advise Owner regarding the Change Proposal, and consider any comments or response from Owner regarding the Change Proposal.

2. *Engineer's Action*: Engineer will review each Change Proposal and, within 30 days after receipt of the Contractor's supporting data, either deny the Change Proposal in whole, approve it in whole, or deny it in part and approve it in part. Such actions shall be in writing, with a copy provided to Owner and Contractor. If Engineer does not take action on the Change Proposal within 30 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of Engineer's inaction the Change Proposal is deemed denied, thereby commencing the time for appeal of the denial under Article 12.

3. *Binding Decision*: Engineer's decision will be final and binding upon Owner and Contractor, unless Owner or Contractor appeals the decision by filing a Claim under Article 12.

B. *Resolution of Certain Change Proposals*: If the Change Proposal does not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters, then Engineer will notify the parties that the Engineer is unable to resolve the Change Proposal. For purposes of further resolution of such a Change Proposal, such notice shall be deemed a denial, and Contractor may choose to seek resolution under the terms of Article 12.

11.07 *Execution of Change Orders*

A. Owner and Contractor shall execute appropriate Change Orders covering:

1. 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;

2. changes in Contract Price resulting from an Owner set-off, unless Contractor has duly contested such set-off;

3. changes in the Work which are: (a) ordered by Owner pursuant to Paragraph 11.02, (b) required because of Owner's acceptance of defective Work under Paragraph 14.04 or Owner's correction of defective Work under Paragraph 14.07, or (c) agreed to by the parties, subject to the need for Engineer's recommendation if the change in the Work involves the design (as set forth in the Drawings, Specifications, or otherwise), or other engineering or technical matters; and

4. changes in the Contract Price or Contract Times, or other changes, which embody the substance of any final and binding results under Paragraph 11.06, or Article 12.

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B. If Owner or Contractor refuses to execute a Change Order that is required to be executed under the terms of this Paragraph 11.07, it shall be deemed to be of full force and effect, as if fully executed.

11.08 *Notification to Surety*

A. If the provisions of any bond require notice to be given to a surety 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), 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.

ARTICLE 12 – CLAIMS

12.01 *Claims*

A. *Claims Process*: The following disputes between Owner and Contractor shall be submitted to the Claims process set forth in this Article:

1. Appeals by Owner or Contractor of Engineer's decisions regarding Change Proposals;

2. Owner demands for adjustments in the Contract Price or Contract Times, or other relief under the Contract Documents; and

3. Disputes that Engineer has been unable to address because they do not involve the design (as set forth in the Drawings, Specifications, or otherwise), the acceptability of the Work, or other engineering or technical matters.

B. *Submittal of Claim*: The party submitting a Claim shall deliver it directly to the other party to the Contract promptly (but in no event later than 30 days) after the start of the event giving rise thereto; in the case of appeals regarding Change Proposals within 30 days of the decision under appeal. The party submitting the Claim shall also furnish a copy to the Engineer, for its information only. The responsibility to substantiate a Claim shall rest with the party making the Claim. In the case of a Claim by Contractor seeking an increase in the Contract Times or Contract Price, or both, Contractor shall certify that the Claim is made in good faith, that the supporting data are accurate and complete, and that to the best of Contractor's knowledge and belief the amount of time or money requested accurately reflects the full amount to which Contractor is entitled.

C. *Review and Resolution*: The party receiving a Claim shall review it thoroughly, giving full consideration to its merits. The two parties shall seek to resolve the Claim through the exchange of information and direct negotiations. The parties may extend the time for resolving the Claim by mutual agreement. All actions taken on a Claim shall be stated in writing and submitted to the other party, with a copy to Engineer.

D. *Mediation*:

1. At any time after initiation of a Claim, Owner and Contractor may mutually agree to mediation of the underlying dispute. The agreement to mediate shall stay the Claim submittal and response process.

2. If Owner and Contractor agree to mediation, then after 60 days from such agreement, either Owner or Contractor may unilaterally terminate the mediation process, and the Claim submittal and decision process shall resume as of the date of the termination. If the mediation proceeds but is unsuccessful in resolving the dispute, the Claim

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submittal and decision process shall resume as of the date of the conclusion of the mediation, as determined by the mediator.

3. Owner and Contractor shall each pay one-half of the mediator's fees and costs.

E. *Partial Approval*: If the party receiving a Claim approves the Claim in part and denies it in part, such action shall be final and binding unless within 30 days of such action the other party invokes the procedure set forth in Article 17 for final resolution of disputes.

F. *Denial of Claim*: If efforts to resolve a Claim are not successful, the party receiving the Claim may deny it by giving written notice of denial to the other party. If the receiving party does not take action on the Claim within 90 days, then either Owner or Contractor may at any time thereafter submit a letter to the other party indicating that as a result of the inaction, the Claim is deemed denied, thereby commencing the time for appeal of the denial. A denial of the Claim shall be final and binding unless within 30 days of the denial the other party invokes the procedure set forth in Article 17 for the final resolution of disputes.

G. *Final and Binding Results*: If the parties reach a mutual agreement regarding a Claim, whether through approval of the Claim, direct negotiations, mediation, or otherwise; or if a Claim is approved in part and denied in part, or denied in full, and such actions become final and binding; then the results of the agreement or action on the Claim shall be incorporated in a Change Order to the extent they affect the Contract, including the Work, the Contract Times, or the Contract Price.

ARTICLE 13 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

13.01 *Cost of the Work*

A. *Purposes for Determination of Cost of the Work*: The term Cost of the Work means the sum of all costs necessary for the proper performance of the Work at issue, as further defined below. The provisions of this Paragraph 13.01 are used for two distinct purposes:

1. To determine Cost of the Work when Cost of the Work is a component of the Contract Price, under cost-plus-fee, time-and-materials, or other cost-based terms; or

2. To determine the value of a Change Order, Change Proposal, Claim, set-off, or other adjustment in Contract Price. When the value of any such adjustment is determined on the basis of Cost of the Work, Contractor is entitled only to those additional or incremental costs required because of the change in the Work or because of the event giving rise to the adjustment.

B. *Costs Included*: Except as otherwise may be agreed to in writing by Owner, costs included in the Cost of the Work shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 13.01.C, and shall include only the following items:

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 on the Work. 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, and vacation and holiday pay applicable

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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 13.01.

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, as 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 6.05), provided such losses and damages have resulted from causes

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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 communication service at the Site, express and courier services, and similar petty cash items in connection with the Work.

i. The costs of premiums for all bonds and insurance that Contractor is required by the Contract Documents to purchase and maintain.

C. *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, attorneys, 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 13.01.B.1 or specifically covered by Paragraph 13.01.B.4. The payroll costs and other compensation excluded here 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 Paragraph 13.01.B.

D. *Contractor's Fee*: When the Work as a whole 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, Change Proposal, Claim, set-off, or other 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 11.04.C.

E. *Documentation*: Whenever the Cost of the Work for any purpose is to be determined pursuant to this Article 13, 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.

13.02 *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.

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B. *Cash Allowances*: Contractor agrees that:

1. 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

2. 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*: 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.

13.03 *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. Payments to Contractor for Unit Price Work will be based on actual quantities.

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. 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 the following paragraph.

E. Within 30 days of Engineer's written decision under the preceding paragraph, Contractor may submit a Change Proposal, or Owner may file a Claim, seeking an adjustment in the Contract Price 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;

2. there is no corresponding adjustment with respect to any other item of Work; and

3. Contractor believes that it 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.

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ARTICLE 14 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

14.01 *Access to Work*

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

14.02 *Tests, Inspections, and Approvals*

A. Contractor shall give Engineer timely notice of readiness of the Work (or specific parts thereof) for all required inspections and tests, and shall cooperate with inspection and testing personnel to facilitate required inspections and tests.

B. Owner shall retain and pay for the services of an independent inspector, testing laboratory, or other qualified individual or entity to perform all inspections and tests expressly required by the Contract Documents to be furnished and paid for by Owner, except that costs incurred in connection with tests or inspections of covered Work shall be governed by the provisions of Paragraph 14.05.

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, obtaining, and paying for all inspections and tests required:

1. by the Contract Documents, unless the Contract Documents expressly allocate responsibility for a specific inspection or test to Owner;

2. to attain Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work;

3. by manufacturers of equipment furnished under the Contract Documents;

4. for testing, adjusting, and balancing of mechanical, electrical, and other equipment to be incorporated into the Work; and

5. for acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work.

Such inspections and tests shall be performed by independent inspectors, testing laboratories, or other qualified individuals or entities acceptable to Owner and Engineer.

E. If the Contract Documents require the Work (or part thereof) to be approved by Owner, Engineer, or another designated individual or entity, then Contractor shall assume full responsibility for arranging and obtaining such approvals.

F. 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, Contractor shall, if requested by Engineer, uncover such Work for observation. Such uncovering shall be at Contractor's expense unless Contractor had given Engineer timely notice of Contractor's intention to

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cover the same and Engineer had not acted with reasonable promptness in response to such notice.

14.03 *Defective Work*

A. *Contractor's Obligation*: It is Contractor's obligation to assure that the Work is not defective.

B. *Engineer's Authority*: Engineer has the authority to determine whether Work is defective, and to reject defective Work.

C. *Notice of Defects*: Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor.

D. *Correction, or Removal and Replacement*: Promptly after receipt of written notice of defective Work, Contractor shall correct all such defective Work, whether or not fabricated, installed, or completed, or, if Engineer has rejected the defective Work, remove it from the Project and replace it with Work that is not defective.

E. *Preservation of Warranties*: When correcting defective Work, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

F. *Costs and Damages*: In addition to its correction, removal, and replacement obligations with respect to defective Work, Contractor shall pay all claims, costs, losses, and damages arising out of or relating to defective Work, including but not limited to the cost of the inspection, testing, correction, removal, replacement, or reconstruction of such defective Work, fines levied against Owner by governmental authorities because the Work is defective, and the costs of repair or replacement of work of others resulting from defective Work. Prior to final payment, if Owner and Contractor are unable to agree as to the measure of such claims, costs, losses, and damages resulting from defective Work, then Owner may impose a reasonable set-off against payments due under Article 15.

14.04 *Acceptance of Defective Work*

A. If, instead of requiring correction or removal and replacement of defective Work, Owner prefers to accept it, Owner may do so (subject, if such acceptance occurs prior to final payment, to Engineer's confirmation that such acceptance is in general accord with the design intent and applicable engineering principles, and will not endanger public safety). Contractor shall pay all claims, costs, losses, and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness), and for the diminished value of the Work to the extent not otherwise paid by Contractor. If any such acceptance occurs prior to final payment, the necessary revisions in the Contract Documents with respect to the Work shall be incorporated in a Change Order. If the parties are unable to agree as to the decrease in the Contract Price, reflecting the diminished value of Work so accepted, then Owner may impose a reasonable set-off against payments due under Article 15. If the acceptance of defective Work occurs after final payment, Contractor shall pay an appropriate amount to Owner.

14.05 *Uncovering Work*

A. Engineer has the authority to require special inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

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B. If any Work is covered contrary to the written request of Engineer, then Contractor shall, if requested by Engineer, uncover such Work for Engineer's observation, and then replace the covering, all at Contractor's expense.

C. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, then 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, and provide all necessary labor, material, and equipment.

1. If it is found that the uncovered Work is defective, Contractor shall be responsible for all claims, costs, losses, and damages 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 pending Contractor's full discharge of this responsibility the Owner shall be entitled to impose a reasonable set-off against payments due under Article 15.

2. 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, then Contractor may submit a Change Proposal within 30 days of the determination that the Work is not defective.

14.06 *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, then 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.

14.07 *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, 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, then 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 14.07, 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, 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 incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 14.07 will be charged against Contractor as set-offs against payments due under Article 15. Such claims, costs, losses and damages will

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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 14.07.

ARTICLE 15 – PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

15.01 *Progress Payments*

A. *Basis for Progress Payments*: The Schedule of Values established as provided in Article 2 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 during the pay period, as determined under the provisions of Paragraph 13.03. Progress payments for cost-based Work will be based on Cost of the Work completed by Contractor during the pay period.

B. *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, a warehouse bond, 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.

C. *Review of Applications*:

1. Engineer will, within 10 days after receipt of each Application for Payment, including each resubmittal, 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 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:

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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, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 13.03, and 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; or

b. 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 money 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 15.01.C.2.

6. Engineer will recommend reductions in payment (set-offs) necessary in Engineer's opinion to protect Owner from loss because:

a. the Work is defective, requiring correction or replacement;

b. the Contract Price has been reduced by Change Orders;

c. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible; or

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e. Engineer has actual knowledge of the occurrence of any of the events that would constitute a default by Contractor and therefore justify termination for cause under the Contract Documents.

D. *Payment Becomes Due*:

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended (subject to any Owner set-offs) will become due, and when due will be paid by Owner to Contractor.

E. *Reductions in Payment by Owner*:

1. In addition to any reductions in payment (set-offs) recommended by Engineer, Owner is entitled to impose a set-off against payment based on any of the following:

a. claims have been made against Owner on account of Contractor's conduct in the performance or furnishing of the Work, or Owner has incurred costs, losses, or damages on account of Contractor's conduct in the performance or furnishing of the Work, including but not limited to claims, costs, losses, or damages from workplace injuries, adjacent property damage, non-compliance with Laws and Regulations, and patent infringement;

b. Contractor has failed to take reasonable and customary measures to avoid damage, delay, disruption, and interference with other work at or adjacent to the Site;

c. Contractor has failed to provide and maintain required bonds or insurance;

d. Owner has been required to remove or remediate a Hazardous Environmental Condition for which Contractor is responsible;

e. Owner has incurred extra charges or engineering costs related to submittal reviews, evaluations of proposed substitutes, tests and inspections, or return visits to manufacturing or assembly facilities;

f. the Work is defective, requiring correction or replacement;

g. Owner has been required to correct defective Work in accordance with Paragraph 14.07, or has accepted defective Work pursuant to Paragraph 14.04;

h. the Contract Price has been reduced by Change Orders;

i. an event that would constitute a default by Contractor and therefore justify a termination for cause has occurred;

j. liquidated damages have accrued as a result of Contractor's failure to achieve Milestones, Substantial Completion, or final completion of the Work;

k. 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;

l. there are other items entitling Owner to a set off against the amount recommended.

2. If Owner imposes any set-off against payment, whether based on its own knowledge or on the written recommendations of Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and the specific amount of the reduction, and promptly pay Contractor any amount

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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, if Contractor remedies the reasons for such action. The reduction imposed shall be binding on Contractor unless it duly submits a Change Proposal contesting the reduction.

3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 15.01.C.1 and subject to interest as provided in the Agreement.

15.02 *Contractor's Warranty of Title*

A. Contractor warrants and guarantees that title to all Work, materials, and equipment furnished under the Contract will pass to Owner free and clear of (1) all Liens and other title defects, and (2) all patent, licensing, copyright, or royalty obligations, no later than seven days after the time of payment by Owner.

15.03 *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 and request that Engineer issue a certificate of Substantial Completion. Contractor shall at the same time submit to Owner and Engineer an initial draft of punch list items to be completed or corrected before final payment.

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 preliminary certificate of Substantial Completion which shall fix the date of Substantial Completion. Engineer shall attach to the certificate a punch list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the preliminary certificate during which to make written objection to Engineer as to any provisions of the certificate or attached punch list. If, after considering the objections to the provisions of the preliminary certificate, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the preliminary certificate to Owner, notify Contractor in writing that the Work is not substantially complete, stating the reasons therefor. If Owner does not object to the provisions of the certificate, or if despite consideration of Owner's objections Engineer concludes that the Work is substantially complete, then Engineer will, within said 14 days, execute and deliver to Owner and Contractor a final certificate of Substantial Completion (with a revised punch list of items to be completed or corrected) reflecting such changes from the preliminary certificate as Engineer believes justified after consideration of any objections from Owner.

D. At the time of receipt of the preliminary certificate of Substantial Completion, Owner and Contractor will confer regarding Owner's use or occupancy of the Work following Substantial Completion, review the builder's risk insurance policy with respect to the end of the builder's risk coverage, and confirm the transition to coverage of the Work under a permanent property insurance policy held by Owner. Unless Owner and Contractor agree otherwise in writing, Owner shall bear responsibility for security, operation, protection of the Work, property insurance, maintenance, heat, and utilities upon Owner's use or occupancy of the Work.

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E. After Substantial Completion the Contractor shall promptly begin work on the punch list of items to be completed or corrected prior to final payment. In appropriate cases Contractor may submit monthly Applications for Payment for completed punch list items, following the progress payment procedures set forth above.

F. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the punch list.

15.04 *Partial Use or Occupancy*

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. At any time Owner may request in writing that Contractor permit Owner to use or occupy any such part of the Work that Owner believes to be substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 15.03.A through E for that part of the Work.

2. At any time Contractor may notify Owner and Engineer in writing that Contractor considers any such part of the Work 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 15.03 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 6.05 regarding builder's risk or other property insurance.

15.05 *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, or agreed portion thereof, is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

15.06 *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

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inspection, annotated record documents (as provided in Paragraph 7.11), and other documents, Contractor may make application for final payment.

2. The final Application for Payment shall be accompanied (except as previously delivered) by:

   a. all documentation called for in the Contract Documents;

   b. consent of the surety, if any, to final payment;

   c. satisfactory evidence that all title issues have been resolved such that title to all Work, materials, and equipment has passed to Owner free and clear of any Liens or other title defects, or will so pass upon final payment.

   d. a list of all disputes that Contractor believes are unsettled; and

   e. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of the Work, and of Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 15.06.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (a) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (b) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, 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, or Owner at its option may issue joint checks payable to Contractor and specified Subcontractors and Suppliers.

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 have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of final payment and present the Application for Payment to Owner for payment. Such recommendation shall account for any set-offs against payment that are necessary in Engineer's opinion to protect Owner from loss for the reasons stated above with respect to progress payments. 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 15.07. 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. *Completion of Work*: The Work is complete (subject to surviving obligations) when it is ready for final payment as established by the Engineer's written recommendation of final payment.

D. *Payment Becomes Due*: Thirty days after the presentation to Owner of the final Application for Payment and accompanying documentation, the amount recommended by Engineer (less any further sum Owner is entitled to set off against Engineer's recommendation,

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including but not limited to set-offs for liquidated damages and set-offs allowed under the provisions above with respect to progress payments) will become due and shall be paid by Owner to Contractor.

15.07 *Waiver of Claims*

A. The making of final payment will not constitute a waiver by Owner of claims or rights against Contractor. Owner expressly reserves claims and rights arising from unsettled Liens, from defective Work appearing after final inspection pursuant to Paragraph 15.05, from Contractor's failure to comply with the Contract Documents or the terms of any special guarantees specified therein, from outstanding Claims by Owner, or from Contractor's continuing obligations under the Contract Documents.

B. The acceptance of final payment by Contractor will constitute a waiver by Contractor of all claims and rights against Owner other than those pending matters that have been duly submitted or appealed under the provisions of Article 17.

15.08 *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 Site, adjacent areas that Contractor has arranged to use through construction easements or otherwise, and other adjacent areas used by Contractor as permitted by Laws and Regulations, is found to be defective, then Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:

1. correct the defective repairs to the Site or such other adjacent areas;

2. correct such defective Work;

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 to 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. 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 repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others).

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, 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.

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E. Contractor's obligations under this paragraph are in addition to all other obligations and warranties. The provisions of this paragraph shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

ARTICLE 16 – SUSPENSION OF WORK AND TERMINATION

16.01 *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 written notice to Contractor and Engineer. Such notice will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be entitled to an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension. Any Change Proposal seeking such adjustments shall be submitted no later than 30 days after the date fixed for resumption of Work.

16.02 *Owner May Terminate for Cause*

A. The occurrence of any one or more of the following events will constitute a default by Contractor and 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);

2. Failure of Contractor to perform or otherwise to comply with a material term of the Contract Documents;

3. Contractor's disregard of Laws or Regulations of any public body having jurisdiction; or

4. Contractor's repeated disregard of the authority of Owner or Engineer.

B. If one or more of the events identified in Paragraph 16.02.A occurs, then after giving Contractor (and any surety) ten days written notice that Owner is considering a declaration that Contractor is in default and termination of the contract, Owner may proceed to:

1. declare Contractor to be in default, and give Contractor (and any surety) notice that the Contract is terminated; and

2. enforce the rights available to Owner under any applicable performance bond.

C. Subject to the terms and operation of any applicable performance bond, if Owner has terminated the Contract for cause, Owner may exclude Contractor from the Site, take possession of the Work, 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 complete the Work as Owner may deem expedient.

D. Owner may not proceed with termination of the Contract under Paragraph 16.02.B if Contractor within seven days of receipt of notice of intent to terminate begins to correct its failure to perform and proceeds diligently to cure such failure.

E. If Owner proceeds as provided in Paragraph 16.02.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 the cost to complete the Work, including all related claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals) sustained by Owner, such excess will be paid to Contractor. If the cost to complete the Work including such related claims, costs, losses,

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and damages exceeds 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.

F. 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, or any rights or remedies of Owner against Contractor or any surety under any payment bond or performance bond. Any retention or payment of money due Contractor by Owner will not release Contractor from liability.

G. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 6.01.A, the provisions of that bond shall govern over any inconsistent provisions of Paragraphs 16.02.B and 16.02.D.

16.03 *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; and

3. other reasonable expenses directly attributable to termination, including costs incurred to prepare a termination for convenience cost proposal.

B. Contractor shall not be paid on account of loss of anticipated overhead, profits, or revenue, or other economic loss arising out of or resulting from such termination.

16.04 *Contractor May Stop Work or Terminate*

A. If, through no act or fault of Contractor, (1) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (2) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (3) 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 16.03.

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 are not intended to preclude Contractor from submitting a Change Proposal for an adjustment in Contract Price or Contract Times or otherwise for

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expenses or damage directly attributable to Contractor's stopping the Work as permitted by this paragraph.

ARTICLE 17 – FINAL RESOLUTION OF DISPUTES

17.01 *Methods and Procedures*

A. *Disputes Subject to Final Resolution*: The following disputed matters are subject to final resolution under the provisions of this Article:

1. A timely appeal of an approval in part and denial in part of a Claim, or of a denial in full; and

2. Disputes between Owner and Contractor concerning the Work or obligations under the Contract Documents, and arising after final payment has been made.

B. *Final Resolution of Disputes*: For any dispute subject to resolution under this Article, Owner or Contractor may:

1. elect in writing to invoke the dispute resolution process provided for in the Supplementary Conditions; or

2. agree with the other party to submit the dispute to another dispute resolution process; or

3. if no dispute resolution process is provided for in the Supplementary Conditions or mutually agreed to, give written notice to the other party of the intent to submit the dispute to a court of competent jurisdiction.

ARTICLE 18 – MISCELLANEOUS

18.01 *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, by a commercial courier service or otherwise, to the individual or to a member of the firm or to an officer of the corporation for which it is intended; or

2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the sender of the notice.

18.02 *Computation of Times*

A. When any period of time is referred to in the Contract 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.

18.03 *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. 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.

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18.04 *Limitation of Damages*

A. With respect to any and all Change Proposals, Claims, disputes subject to final resolution, and other matters at issue, neither Owner nor Engineer, nor any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, shall be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

18.05 *No Waiver*

A. A party's non-enforcement of any provision shall not constitute a waiver of that provision, nor shall it affect the enforceability of that provision or of the remainder of this Contract.

18.06 *Survival of Obligations*

A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract, as well as all continuing obligations indicated in the Contract, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

18.07 *Controlling Law*

A. This Contract is to be governed by the law of the state in which the Project is located.

18.08 *Headings*

A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

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Section 00800 - SUPPLEMENTARY CONDITIONS

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ATTACHMENTS

Final Report of Subsurface Exploration, EPD Pump Station
Final Report of Subsurface Exploration, EPD Waterline Upgrades
OEPA Approval Letter
NOI

Section 00800

SUPPLEMENTARY CONDITIONS

SCOPE. These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract (EJCDC® C-700, 2013 Edition) and other provisions of the Contract Documents as indicated herein. All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The article and paragraph numbering system used in these Supplementary Conditions is the same as that used in the General Conditions, with the prefix "SC" added thereto.

SC-1. DEFINITIONS AND TERMINOLOGY.

SC-1.01. Defined Terms. Delete and replace definitions 16, 20, 28, and 48 in Paragraph 1.01.A with the following:

16. Contractor--The individual or entity with which Owner has contracted for the performance of the Work. The terms Contractor and CONTRACTOR are interchangeable and shall have the same meaning in the Contract Documents.

20. Engineer--The individual or entity named as such in the Agreement. The terms Engineer and ENGINEER are interchangeable and shall have the same meaning in the Contract Documents.

28. Owner--The individual or entity with which Contractor has contracted regarding the Work, and which has agreed to pay Contractor for the performance of the Work, pursuant to the terms of the Contract. The terms Owner and OWNER are interchangeable and shall have the same meaning in the Contract Documents.

48. Work Change Directive--A written directive to Contractor issued on or after the Effective Date of the Contract, signed by Owner ordering an addition, deletion or revision in the Work.

Add the following definitions to Paragraph 1.01.A:

49. Contaminated Environmental Media--Soil, sediment, ground water, or air contaminated with Hazardous Substances.

50. Float--The amount of time between the early start date and the late start date, or the early finish date and the late finish date, of any of the activities in the Progress Schedule.

51. Hazardous Substance--The term Hazardous Substance shall have the meaning provided in 29 CRF 1910.120 titled "Hazardous Waste Operations and Emergency Response," as amended from time totime.

52. Hazardous Waste--The term Hazardous Waste shall have the meaning provided in 40 CFR 261 titled "Identification and Listingof Hazardous Waste," as amended from time to time.

SC-2. PRELIMINARY MATTERS.

SC-2.02. Copies of Documents. Delete Paragraph 2.02.A in its entirety and insert the following new paragraph in its place:

A. Owner shall furnish to Contractor four copies of conformedContract Documents incorporating and integrating all Addenda and any amendments negotiated prior to the Effective Date of the Contract (including one fully executed counterpart of the Agreement), and one copy in electronic portable document format (PDF). Additional printed copies of the conformed Contract Documents will be furnished upon request at the cost of reproduction.

SC-3. DOCUMENTS: INTENT, REQUIREMENTS, REUSE.

SC-3.05. Reuse of Documents. Delete Paragraph 3.05.A.1 in its entirety and replace it with the following:

1. have or acquire any title 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 its consultants, including electronic media editions, or reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer or its consultants and specific written verification or adaptation by entity responsible for those documents.

SC-4. COMMENCEMENT AND PROGRESS OF THE WORK – No Modifications

SC-5. AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS.

SC.5.03. Subsurface and Physical Conditions. Add the following new paragraphs immediately after 5.03.A.3:

4. The following reports of explorations and tests of subsurface conditions at or adjacent to the Site are known to Owner:

a. Report dated September 17, 2020, prepared by DLZ Ohio, Inc., titled "Final Report of Subsurface Exploration, Eastern Pressure District Pump Station", consisting of 20 pages.

   The Technical Data contained in such report upon whose accuracy Contractor may rely are those indicated in the definition of Technical Data in the General Conditions.

b. Report dated August 21, 2020, prepared by DLZ Ohio, Inc., titled "Final Report of Subsurface Exploration, Eastern Pressure District Waterline Upgrades", consisting of 63 pages.

   The Technical Data contained in such report upon whose accuracy Contractor may rely are those indicated in the definition of Technical Data in the General Conditions.

SC-5.05. Underground Facilities. Add the following new paragraph immediately after Paragraph 5.05.E of the General Conditions:

F. Generally, service connections are not indicated on the Drawings. Contractor shall be responsible for discovery of existing underground installations, in advance of excavating or trenching, by contacting all local utilities and by prospecting.

SC-5.06. Hazardous Environmental Conditions at Site. Delete paragraph 5.06.I in its entirety.

SC-6. BONDS AND INSURANCE

SC-6.02. Insurance - General Provisions. Add the following paragraphs immediately after Paragraph 6.02.B:

1. All liability insurance carried by all Contractors and Subcontractors are required to be provided by insurance companies rated byBest's Rating Guide not less than A-/X and which are authorized to do business in Ohio.

Add the following paragraph immediately after Paragraph 6.02.C:

1. Certificates of insurance shall be submitted on the forms included in the Contract Documents

SC-6.03. Contractor's Insurance. Add the following to the list of requirements in Paragraph 6.03.C, as a numbered item:

9. A per project aggregate endorsement.
10. Premises Operations

Add the following new paragraphs 6.03.K and 6.03.L immediately after Paragraph 6.03.J:

K. The limits of liability for the insurance required by Paragraph 6.03 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws andRegulations:

1. Workers' Compensation, and related coverages under Paragraphs 6.03.A.1 and A.2 of the General Conditions:

State:	Statutory
Federal, if applicable (e.g., Longshoreman's):	Statutory

2. Contractor's Commercial General Liability under Paragraphs 6.03.B and 6.03.C of the General Conditions:

General Aggregate	$ 1,000,000
Products - Completed Operations Aggregate	$ 1,000,000
Personal and Advertising Injury	$ 1,000,000
Each Occurrence (Bodily Injury and Property Damage)	$ 1,000,000

3. Automobile Liability under Paragraph 6.03.D. of the General Conditions:

Bodily Injury:

Each person	$ 500,000
Each accident	$ 1,000,000

Property Damage:

Each accident	$ 500,000
Combined Single Limit of	$ 1,000,000

4. Excess or Umbrella Liability:

Per Occurrence	$ 5,000,000
General Aggregate	$ 5,000,000

5. Contractor's Pollution Liability:

Each Occurrence	$ 1,000,000
General Aggregate	$ 1,000,000

6. Contractor's Professional Liability: Each

Claim	$ 1,000,000
Annual Aggregate	$ 1,000,000

7. Employer's Liability Coverage:

Each accident or illness	$ 1,000,000

L. Waiver of Subrogation. With respect to workers' compensation and employers' liability, comprehensive automobile liability, commercial general liability, and umbrella liability insurance, and all other liability insurance specified herein to be provided by Contractor, Contractor shall require its insurance carriers to waive all rights of subrogation against Owner, Engineer, and the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them.

Add the following new paragraph 6.03.M immediately after Paragraph 6.03.L:

M. Contractor shall purchase and maintain the following additional insurance:

SC-6.05. Property Insurance. Add the following new paragraph immediately after Paragraph 6.05.A.2:

a. The perils or causes of loss insured against shall also include damage caused by frost and freezing.

Add the following new paragraph immediately after Paragraph 6.05.F:

G. If, following submission of a Bid, Owner requests in writing that other special insurance be included in the property insurance policies provided under this Paragraph 6.05, Contractor shall advise Owner if such insurance is available, determine the cost of such insurance, and communicate the cost to Owner, If Owner agrees, the cost thereof will be charged to Owner by appropriate Change Order or Work Change Directive. Prior to commencement of the Work at the Site, Contractor shall procure the requested insurance.

SC-7. CONTRACTOR'S RESPONSIBILITIES.

SC-7.02. Labor; Working Hours. Add the following new paragraphs immediately after Paragraph 7.02.B:

C. Regular working hours will be between 7:00 a.m. to 6:00 p.m. unless otherwise noted on the plans or in the specifications.

Work outside of regular working hours may be undertaken as a regular procedure with the permission of Owner; such permission, however, may be revoked at any time by Owner if Contractor fails to maintain adequate equipment and supervision for the proper execution and control of work outside of regular working hours.

SC-7.04. "Or-Equals." Delete the fourth sentence of Paragraph 7.04.C and insert the following in its place:

No "or-equal" item will be ordered, furnished, installed, or utilized until Engineer's review is complete and Engineer determines that the proposed item is an "or-equal", which will be evidenced by an accepted Shop Drawing or other written communication.

SC-7.06. Concerning Subcontractors, Suppliers, and Others. Add the following new paragraph immediately after Paragraph 7.06.E:

1. Particular consideration will be given to the qualifications of each Subcontractor proposed on the List of Subcontractors. The use of Subcontractors proposed by Bidder and accepted by Owner prior to the Notice of Award will be required in the performance of the Work unless otherwise permitted or directed by Owner.

SC-7.07. Patent Fees and Royalties. Delete paragraph 7.07.B in its entirety.

Add the following new paragraphs immediately after Paragraph 7.07.C:

D. Contractor shall furnish to Owner at the time of initial submittal, satisfactory evidence that Suppliers of proprietary materials, equipment, devices, or processes to be furnished or used in the performance of the Work do indemnify, keep, and save harmless Contractor from all liabilities, judgments, costs, damages, and expenses which may arise from the use of such proprietary materials, equipment, devices, or processes, furnished to Contractor for incorporation in or use in performance of the Work and their operation by Owner after acceptance of the Work. Such satisfactory evidence shall consist of patent licenses or patent releases covering proprietary materials, equipment, devices, or processes.

E. Separate license fees and/or royalties may be required for the use of specific equipment or materials as required by the Contract Documents, depending upon the Contractor's selected source of supply for such items. Contractor shall be responsible for determining whether any license fees and/or royalties apply to the use of these items and make such payments as appropriate, at no additional cost to Owner.

SC-7.08. Permits. Add the following new paragraph immediately after Paragraph 7.08.A:

B. Owner has obtained and paid for the following permits:

1. State of Ohio Environmental Protection Agency – DOW Plan Approval
2. City of Springfield Building Permit. Building department website is as follows: https://springfieldohio.gov/business-development/building-regulations/
3. Notice of Intent (NOI)

SC-7.09. Taxes. Add the following new paragraph immediately after Paragraph 7.09.A:

B. Materials purchased for this contract are exempt from Ohio Sales Tax under Ohio Revised Code 5739.02 and materials prices quoted should reflect such exemption. The Owner will furnish necessary Certificates of Exemption upon request.

SC-7.10. Laws and Regulations. Modify the following paragraphs and add the following new paragraphs immediately after Paragraph 7.10.C:

C. Add the following new sentences at the end of Paragraph 7.10.C:

The provisions of this Paragraph 7.10.C shall not apply to any changes to prevailing wage rates. Changes to wage rates during the life of the Contract shall be the responsibility of Contractor, and shall not be eligible for Claims for changes to the Contract Price.

D. Safety and Health Regulations. OSHA "Safety and Health Regulations for Construction", Chapter XVII of Title 29, CFR Part 1926, shall apply to Work under

this Contract. The U.S. Department of Labor will be responsible for compliance review and enforcement of theregulations.

E. Employment Requirements. Employment requirements shall be as specified herein and in the attachments at the end of the Supplementary Conditions.

F. Funding Agency Requirements. Contractor will be required to comply with the requirements of Ohio Water Development Authority and prevailing State Wage Rates.

Specific funding agency requirements shall be as specified herein and in the attachments at the end of the Supplementary Conditions.

G. Nondiscrimination in Employment. Contractor and Subcontractors shall not discriminate in employment practices and shall comply with applicable labor standards, laws, and regulations.

Contractor acknowledges that it understands and shall be bound by the equal opportunity requirements of EPA regulations (40 CFR Part 8, particularly Section 8.4(b)), which shall be applicable throughout the performance of Work under this Contract. Contractor shall similarly bind contractually each Subcontractor. Contractor shall engage in affirmative action directed at promoting and ensuring equal employment opportunity in the workforce used under the Contract, and Contractor shall require contractually the same effort of all Subcontractors whose subcontracts exceed $10,000. "Affirmative action" as used herein shall constitute a good faith effort to achieve and maintain that amount of minority employment in the onsite workforce used on the Project which corresponds, for each trade used, to the minority population in the serving labor market area from which workers are reasonably available for hire for the Project.

H. Nonsegregated Facilities. The following requirements apply to this contract:

NOTICE TO PROSPECTIVE FEDERALLY ASSISTED CONSTRUCTION CONTRACTORS

a. A Certification of Nonsegregated Facilities as required by May 28, 1968, order (33 F.R. 7808, May 28, 1968) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a federally assisted construction contract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause.

b. Contractors receiving federally assisted construction contract awards exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of the following notice to prospective Subcontractors for supplies and construction contracts where the subcontracts exceed $10,000 and are not exempt from the provisions of the Equal Opportunity clause.

NOTICE TO PROSPECTIVE SUBCONTRACTORS OF
REQUIREMENT FOR CERTIFICATION OF
NONSEGREGATED FACILITIES

a. A Certification of Nonsegregated Facilities as required by May 28, 1968, order (33 F.R. 7808, May 28, 1968) on Elimination of Segregated Facilities, by the Secretary of Labor, must be submitted prior to the award of a subcontract exceeding $10,000 which is not exempt from the provisions of the Equal Opportunity clause.

b. Contractors receiving subcontract awards exceeding $10,000 which are not exempt from the provisions of the Equal Opportunity clause will be required to provide for the forwarding of this notice to prospective Subcontractors for supplies and construction contracts where the subcontracts exceed $10,000 and are not exempt from the provisions of the Equal Opportunity clause.

I. Preconstruction Equal Opportunity Compliance Conference. As part of the procedure for determining the ability of contractors to comply with the Equal Opportunity clause, prospective Bidders may be required to attend a meeting scheduled by the Environmental Protection Agency prior to opening of Bids where they will be instructed in the equal employment opportunity requirements of the Agency.

J. Buy American Provision. The “Consolidated Appropriations Act, 2014” requires that all of the iron and steel products used in theperformance of this Contract are produced in the United States, unless the Administrator of the Environmental Protection Agency approves a waiver.

K. Archaeological Deposits. If, during the course of construction, evidence of deposits of historical or archaeological interest is found, Contractor shall cease operations affecting the find and shall notify Owner, who shall notify the Regional Office of the Environmental Protection Agency and the State Historic Preservation Officer. No further disturbance of the deposits shall ensue until Contractor has been notified by Owner that Contractor may proceed. Owner willissue a Notice to Proceed only after the state official has surveyed the find and made a determination to the Environmental Protection Agency and Owner. Compensation to Contractor, if any, for lost time or changes in construction to avoid the find, shall be determined in accordance with changed conditions or Change Order provisions of the Contract Documents. (Reference: 80 Stat 915, 16 USC 470, and Executive Order No. 11593 of May 31, 1971.)

L. Work in Confined Spaces. The provisions of 29 CFR Section 1910.146, "Permit-Required Confined Spaces", have been adopted by Owner and shall apply to Work under this Contract. Owner has established a confined-space entry program for its own use, and will be responsible for enforcement of the program for Owner's personnel only.

Contractor is hereby notified that manholes and other structures included under the confined-space definition of 29 CFR 1910.146, shall be considered as hazardous

locations with hazardous atmospheric conditions. The structures may contain methane, hydrogen sulfide, carbon dioxide, and other gases which are dangerous to life or health. Contractor shall allow its personnel or Subcontractors to enter these confined spaces only through compliance with an entry permit program as specified herein.

Contractor shall establish and maintain a confined-space entry program appropriate to the structures and conditions encountered. The program shall meet the requirements of 29 CFR 1910.146 and shall specifically address the provisions of Paragraph (d) therein. Contractor shall enforce the requirements of Paragraphs (e) and (f), shall establish and conduct a training program in accordance with Paragraph (g), and shall comply with all other applicable requirements of the referenced regulation.

Contractor shall prepare a complete written program covering the requirements of this paragraph and the referenced regulation. The written program shall be submitted through Engineer for review and approval by Owner, and shall be modified and resubmitted if required. No Work shall be done by Contractor or any of Contractor's personnel or Subcontractors in any confined spaces until Contractor's program has been approved by Owner and Owner is satisfied that the program provisions are in place.

Upon request, Owner's confined-space entry program will be made available to Contractor for review, but Owner's program shall not be considered as necessarily addressing all steps and measures to be taken into account. Contractor shall cooperate with Owner for coordination of activities whenever Contractor's personnel and Owner's personnel will both be working in or near the confined spaces at the same time.

M. Violating Facilities. Contractor agrees to comply with all applicable standards, orders, or requirements under Section 306 of the Clean Air Act, 42 USC 1857 (h), Section 508 of the Clean Water Act, 33 USC 1368, Executive Order 11738, and EPA regulations, 40 CFR Part 32, which prohibits the use under non-exempt Federal contracts, grants, or loans of facilities included on the EPA List of Violating Facilities.

SC-7.11. Record Documents. Delete Paragraph 7.11.A in its entirety and insert the following it its place:

A. Record Documents. Contractor shall maintain in a safe place at the Site one printed record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, written interpretations and clarifications, and accepted Shop Drawings. Contractor shall keep such record documents in good order and annotate them to show changes made during construction. These record documents, together with all accepted Samples, will be available to Engineer for reference. Upon completion of the Work, Contractor shall deliver these record documents to Engineer.

SC-7.16. Shop Drawings, Samples, and Other Submittals. Delete Paragraph 7.16 in its entirety and replace it with the following:

7.16. Shop Drawings Samples, and Other Submittals. Requirements for shop drawings, samples, and submittal procedures shall be as specified in Division 1 Submittals Procedures section. Fabrication that proceeds prior to acceptance of submittals by Engineer shall be at Contractor's risk.

SC-7.17. Contractor's General Warranty and Guarantee. Delete Paragraphs 7.17.C.5, 7.17.C.6, 7.17.C.7 and 7.17.C.8 and replace with the following Paragraphs 7.17.C.5, 7.17.C.6, 7.17.C.7, 7.17.C.8 and 7.17.C.9.

5. any review and acceptance of a Shop Drawing or Sample submittal;

6. the issuance of a notice of acceptability by Engineer;

7. any inspection, test, or approval by others;

8. any correction of defective Work by Owner; or

9. any expiration of a correction period.

SC-7.19 Delegation of Professional Design Services.

7.19. Delegation of Professional Design Services. Delete Paragraph 7.19.D in its entirety, and replace with the following Paragraph 7.19.D:

D. Pursuant to this Paragraph 7.19, Engineer's review and acceptance 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 acceptance of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Division 1 Submittals Procedures section.

Add the following new Paragraph 7.19.F immediately after Paragraph 7.19.E:

F. When professional design services are required by the Contract Documents, Contractor shall provide certification that the associated construction conforms to the design provided by the design professional.

SC-8. OTHER WORK AT THE SITE – No Modifications.

SC-9. OWNER'S RESPONSIBILITIES.

SC-9.01. Communications to Contractor. Delete Paragraph 9.01.A in its entirety, and replace it with the following:

A. Except as otherwise provided in these General Conditions, if Owner issues communications to Contractor, a copy shall be provided to Engineer

SC-10. ENGINEER'S STATUS DURING CONSTRUCTION.

SC-10.01. Owner's Representative. Add the following sentence at the end of Paragraph 10.01.A:

The action of Engineer in performance of these duties shall not be construed to make Engineer the Agent for Owner with respect to changes in the cost of the work or changes in the Contract Documents.

SC-10.07. Decisions on Requirements of Contract Documents and Acceptability of Work.

Add the following new words at the end of the first sentence of Paragraph 10.07.A:

…insofar as the subject matter of any pertinent claim, dispute, or other matter falls within the realm of the technical expertise of Engineer.

Add the following new sentence at the end of Paragraph 10.07.A:

Engineer shall not render any decision on any matters the subject matter of which, at Engineer's sole discretion, requires legal, rather than technical, interpretation.

SC-11. AMENDING THE CONTRACT DOCUMENTS; CHANGES IN THE WORK.

SC-11.05. Change of Contract Times. Add the following new paragraphs after Paragraph 11.05.B:

A. A Change Proposal for an adjustment of the Contract Times (or Milestones), otherwise allowable under the Contract Documents, shall be granted only to the extent the time lost exceeds the Float for the delayed activity at the time of the event giving rise to the claim. Float, whether expressly disclosed or implied in any manner, is jointlyowned by the project participants.

B. Contractor shall not use Float suppression techniques (including, but not limited to, preferential sequencing caused by late starts of follow-up trades, unreasonably small crews, extended durations, or imposed dates) in information provided to Engineer.

SC-12. CLAIMS – No Modifications.

SC-13. COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK.

SC-13.02. Allowances. Delete Paragraph 13.02.D in its entirety, and replace with the

following:

D. Prior to final payment, an appropriate Change Order will be issued to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondinglyadjusted.

SC-13.03. Unit Price Work. Add the following new paragraph immediately after Paragraph 13.03.E:

F. The unit price of an item of Unit Price Work shall be subject to reevaluation and adjustment if the variation in the actual quantity of an item of Unit Price Work performed by Contractor differs by more than 25 percent from the estimated quantity of that item indicated in theBid.

SC-14. TESTS AND INSPECTIONS; CORRECTION, REMOVAL, OR ACCEPTANCE OF DEFECTIVE WORK.

SC-14.01.B. Access to Work. Add the following new paragraph immediately after Paragraph 14.01.A:

B. Authorized representatives of the United States Environmental Protection Agency and of the Ohio Environmental Protection Agency shall have access to the Work wherever it is in preparation or progress. Contractor shall provide proper facilities for such access and inspection.

SC-14.05 Uncovering Work. Delete Paragraph 14.05.A in its entirety and insert the following in its place:

A. Engineer has the authority to require inspection or testing of the Work, whether or not the Work is fabricated, installed, or completed.

SC-15. PAYMENTS TO CONTRACTOR; SET-OFFS; COMPLETION; CORRECTION PERIOD

SC-15.01. Progress Payments. Replace Paragraph 15.01.B. 3 as follows:

3. The amount of retainage with respect to progress payments will be as stipulated in the City's General Provisions Section 103.371.

SC-15.01. Progress Payments. Add the following, as numbered items, to the list of items in Paragraph 15.01.B:

4. Materials and Equipment. Payments for stored materials and equipment shall be based only upon the actual cost to Contractor of the materials and equipment and shall not include any overhead or profit to Contractor.

   Partial payments will not be made for undelivered materials or equipment.

5. Schedules and Data. During the progress of the Work, each application for Payment shall be accompanied by Contractor's updated Progress Schedule, schedule of operations, or progress report, with such shop drawings schedules, procurement schedules, values of materials and equipment on hand included in application, and other data specified or reasonably required by Engineer.

6. Labor Standards Certificate. As provided under Labor Standards each Application for Payment shall be accompanied by a certificate that all labor standards requirements have been fulfilled.

Delete Paragraph 15.01.D in its entirety and insert the following in its place:

D. Within 30 days after presentation of the Application for Payment to Owner with Engineer's recommendation and all accompanying documents required for processing of the Application (including properly certified payroll records) being deemed complete by the Owner, the amount recommended (subject to any Owner set-offs and/or retainage) will become due, and when due will be paid by Owner to Contractor.

Before the payment of any estimate is made, the Contractor shall certify under oath:

a) the names and addresses of all Subcontractors and Suppliers furnishing labor, material or services of all persons furnishing material included in such estimate.
b) That all bills for materials and labor included in the preceeding estimates have been paid in full (or if not paid in full, a list of unpaid bills giving the amount paid ot each Supplier or Subcontractor, together with the reason for non-payment) and
c) That all bills for materials and labor included in such estimate have been or will be paid from the proceeds thereof.

In addition to foregoing, the Engineer or the City may require the Contractor to furnish waivers of lien signed by all persons furnishing labor or materials included in any Estimate submitted by or on behalf of the Contractor.

Delete Paragraph 15.01. E.1.j. in its entirely and insert the following in its place:

E.1.j. liquidated damages have accrued as a result of Contactor's failure to achieve Milestones, Substantial Completion, or final completion of the Work. Liquidated damages shall be assessed in accordance with City's General Provisions 103.34 and the Schedule of Liquidated Damages.

SC-15.03. Substantial Completion. Add the following new paragraphs immediately after Paragraph 15.03.A:

1. "Substantial Completion" means that the facilities are completed to the point that all water main are tested, approved, and in service, and the booster pump

station is commissioned, operational demonstration completed, and placed in service, to the satisfaction of Engineer. All equipment shall be installed and operational demonstration shall be complete as defined in Section 01 79 00 – Demonstration and Training.

2. To be considered substantially complete, the following portions of the Work must be operational and ready for Owner's continuous use as intended:

   New EPD Booster Station

   Completion of new watermains

3. Portions of the Work not essential to facility operation, which can be completed without interruption of operation, may becompleted after the Work is accepted as substantially complete, and may include the following items:

   Fencing

   Seeding and sodding

   Site Restoration

SC15.06. Final Payment. Delete Paragraph 15.06.A.2.b in its entirety and insert the following in its place:

b. consent of the surety, signed by an agent and accompanied by a certified copy of such agent's authority to act for the surety;

SC-16. SUSPENSION OF WORK AND TERMINATION. No modifications. SC-17.

FINAL RESOLUTION OF DISPUTES.

SC-17.02. Dispute Resolution Procedure. Add the following new paragraph immediately after Paragraph 17.01:

17.02. Dispute Resolution Procedure.

A. Arbitration will not be acceptable as a means for settling claims, disputes, or other matters. Owner and Contractor may exercise such rights or remedies as they have under Controlling Law. Notwithstanding the foregoing, Owner and Contractor may, by mutual agreement, use mediation as a dispute resolution process. Owner and Contractor shall each bear one half of the cost of the mediator and the facilities used for the mediation sessions.

SC-18. MISCELLANEOUS.

SC-18.06. Survival of Obligations. Add the following new paragraph immediately after

Paragraph 18.06.A of the General Conditions:

B. Contractor shall obtain from all Suppliers and manufacturers any and all warranties and guarantees of such Suppliers and manufacturers, whether or not specifically required by the Specifications, and shall assign such warranties and guarantees to Owner. With respect thereto, Contractor shall render reasonable assistance to Owner when requested, in order to enable Owner to enforce such warranties and guarantees. The assignment of any warranties or guarantees shall not affect the correction period or any other provisions of these Contract Documents.

End of Section

DLZ
ARCHITECTURE • ENGINEERING • PLANNING
SURVEYING • CONSTRUCTION SERVICES

INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

FINAL REPORT
OF
SUBSURFACE EXPLORATION

Eastern Pressure District Pump Station

City of Springfield, Ohio
Clark County, Ohio

Prepared For:

Burgess & Niple
5085 Reed Rd,
Columbus, OH 43220

Vui Chung, PE
Project Manager

Prepared By:

DLZ

DLZ OHIO, INC.

DLZ Job No. 2021-3007.00

September 17, 2020

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1.0 INTRODUCTION

This report presents the findings of the subsurface exploration performed for the proposed Springfield, Ohio Eastern Pressure District Waterline Upgrades project which includes the design and construction of a new pump station west of Ogden Road.

The purpose of this exploration was to 1) determine the subsurface conditions to the depths penetrated by the borings, 2) evaluate the engineering characteristics of the subsurface materials, and 3) determine potential design or construction problems related to the subsurface conditions.

The geotechnical engineer has planned and supervised the performance of the geotechnical engineering services, has considered the findings, and has prepared this report in accordance with generally accepted geotechnical engineering practices. No other warranties, either expressed or implied, are made as to the professional advice included in this report.

2.0 GENERAL PROJECT INFORMATION

The project site is located on the east side of the City of Springfield in Clark County, Ohio. It is our understanding that the waterline upgrades include a proposed 24-inch water main from the proposed pump station west of Ogden Road and running east along E National Road (US 40) between Old Columbus Road and Verona Drive. It also includes a proposed connected 12-inch water main along S Bird Road between E National Road (US 40) and S.R. 41. The geotechnical exploration and associated recommendations contained herein are relevant to the pump station.

The recommendations presented in this report have been made based on the foregoing information. If the proposed location or design concepts are changed or differ from that assumed, DLZ should be informed of the changes so that recommendations and conclusions presented in this report may be revised as necessary.

3.0 SITE OBSERVATIONS AND GEOLOGY

A representative of DLZ completed field reconnaissance of the project site prior to drilling in order to locate the borings and note any field conditions that would affect the field exploration or proposed improvements. The proposed water main alignment is located along US 40 stretching from Old Columbus Road to Verona Drive and along S Bird Road from US 40 to S.R. 41. The proposed pump station will be located on a property owned by Clark County from which the City of Springfield has obtained a permanent easement and the surrounding area is residential. The site is located in an open grass field behind existing County facilities. The surrounding area is primarily urban commercial.

The project is located within the Mad River Interlobate Plain physiographic region of Ohio. According to resources published by the Ohio Division of Geological Survey (1998), the Mad River Interlobate Plain is an area between two major converging glacial lobes including extensive outwash, outwash terraces and bordering

moraines. The topography is generally found to have moderate relief. The glacial deposits found in the area are reportedly high-lime Wisconsin-aged till with gravel outwash deposits. Till is typically an unsorted mix of silt, clay, sand, gravel, and boulders. Bedrock consists of Silurian to Devonian-age carbonate rocks. Bedrock is mapped at approximately 900 feet above mean seal level (AMSL) which is approximately 100 feet below the existing ground surface. According to the Groundwater Resources Map of Clark County, Ohio (1982), the site is in an area of: 1) thick glacial drift yielding as much as 100 gallons per minute 2) thin unconsolidated glacial deposits yielding 3 to 10 gallons per minute.

4.0 FIELD EXPLORATION

The field exploration consisted of drilling (2) borings, designated as SB-1-P and SB-2-P. The borings were located in the field by representatives of DLZ based on the pump station plans provided by the client, Burgess & Niple. The borings were drilled on April 13, 2020. Each of the borings were drilled to a depth of 35 feet below the existing ground surface.

Both borings were performed using an ATV-mounted rotary drill rig. The borings were advanced through the soil using 3.25-inch I.D. hollow stem augers. Disturbed split-spoon soil samples were obtained with a 2-inch OD split-barrel sampler in accordance with the Standard Penetration Test (ASTM D1586) at 2.5-foot intervals through the soil overburden to the completion depth of the borings. The hammer system used on the ATV-mounted drill rig was calibrated on April 26, 2018. The hammer had an average drill rod energy efficiency ratio (ER) of 95.2 percent.

Groundwater was encountered in SB-2-P, and the measurements for where groundwater was encountered were recorded during drilling and upon completion of drilling. The borings were backfilled with hole plug and soil cuttings after the final water level measurements were obtained. The approximate locations of the borings and the ground surface elevations at the boring locations were obtained from existing digital elevation models (Google Earth).

5.0 LABORATORY TESTING

The samples from the borings were returned to the laboratory where they were visually classified using the Unified Soil Classification System and logged by an engineer.

The following physical property laboratory tests were performed on selected soil samples:

- Natural water content (ASTM D 2216)
- Grain-size analysis (ASTM D 6913 and D 7928)
- Atterberg limits (ASTM D 4318)

The results of the physical property tests are shown on the boring logs in the Appendix. Individual test reports are presented in the Appendix of this report.

6.0 FINDINGS

The subsurface conditions encountered in the borings generally consisted of low plasticity fine-grained soils with isolated silt and sand layers. For more detailed information, please refer to the boring logs presented in Appendix of this report. Please note that the strata contact lines shown on the boring logs represent approximate boundaries between soil types. In the field, the actual soil transition might be different both vertically and laterally.

6.1 SOIL CONDITIONS

At the ground surface, the boring SB-1-P encountered 4 inches of topsoil. Topsoil was not recorded in boring SB-2-P. Beneath the surficial materials, borings SB-1-P and SB-2-P encountered stiff to very stiff fine-grained materials (CL) down to approximately 21 feet below the ground surface. An isolated layer of gravel (GM) was encountered in SB-2-P approximately 16 feet below the ground surface. Dense to very dense coarse grained and non-plastic fine-grained materials (SM, SW-SM, and ML) were encountered to the completion of each boring at 35 feet feet below the ground surface. Hard fine-grained material (CL) was encountered borings SB-1-P and SB-2-P at depths of 31.0 to 33.5 feet and 33.5 to 35 feet, respectively.

Bedrock was not encountered in either boring.

6.2 GROUNDWATER CONDITIONS

Seepage was first encountered during drilling in boring SB-2-P at a depth of approximately 26 feet below existing ground surface. Groundwater levels were observed at a depth of approximately 31.3 feet in boring SB-2-P.

It should be noted that groundwater levels may fluctuate with seasonal variations and following periods of heavy or prolonged precipitation. During construction or at other times during the project life, water levels may be higher or lower than observed at the time of this subsurface exploration.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 GENERAL CONSIDERATIONS

It is understood that the proposed pump station will extend to an approximate elevation of 1017 feet, based on information provided by Burgess & Niple. Based on available information provided by Burgess & Niple, it is understood that the proposed pump station consists of a pump room, office area, and electrical room. For the purposes of this report, the building was assumed to be supported by mat foundations at the base of two trenches.

7.2 PUMP STATION FOUNDATION RECOMMENDATIONS

Based on the design information, the bottom elevation of the pump station is at approximately 1017 feet. Given the soil information in borings SB-P-1 and SB-P-2, the proposed pump station will be founded on stiff to very stiff sandy lean clay (CL). An allowable net bearing pressure of 2,000 pounds per square foot (psf) may be used to design and proportion the foundations. A coefficient of base friction of 0.30 may be used for the contact between concrete and the clay soils.

Based on information available in the 60% design plans provided by Burgess & Niple, it is understood that concrete slabs on grade will be used for the finished grade floor of portions of the structure. It is recommended that a minimum six-inch layer of compacted open graded crushed stone (ASTM C-33 Size No. 57) be installed below the slabs with a moisture retarder placed between the slab and the open graded crushed stone. A modulus of subgrade reaction of 150 pounds per cubic inch (pci) may be used for the six-inch layer of compacted open grade crushed stone.

It is assumed that the foundations will not support machine equipment with dynamic loading.

All foundation excavations should be observed by the geotechnical engineer of record or a designated representative to verify the suitability of the bearing material. Any wet, soft, or loose materials observed should be removed to expose suitable bearing material.

The borings drilled at the proposed structure encountered seepage below the anticipated depths of excavations. However, Contractors should still be prepared to deal with any water from seepage or precipitation that enters the excavations. Additional information regarding the groundwater conditions and dewatering is presented in the Section 7.5 of this report.

7.3 LATERAL EARTH PRESSURE RECOMMENDATIONS

The proposed structures should be designed to resist the lateral loads imposed by the soil backfill, groundwater behind the wall, and surcharge effects of adjacent structures, vehicles, or equipment. Since extensive compaction of backfill against a rigid wall can result in excessive lateral earth pressures, it is recommended that the backfill material within a few feet of the walls be placed in lifts not exceeding 8 inches loose thickness and compacted with hand-operated compaction equipment to 95 percent of the maximum dry density as determined by ASTM D698 (Standard Proctor).

Table 1 presents suggested equivalent fluid unit weights assuming a horizontal backslope behind the walls. The values given for submerged soil include the weight of water.

Table 1: Suggested Equivalent Fluid Unit Weights for Backfill Materials

Type of Material	Equivalent Fluid Unit Weights (pcf)			
	"Active" Condition		"At Rest" Condition	
	Unsaturated	Submerged	Unsaturated	Submerged
Moderately compacted free-draining granular backfill with less than 5 % finer than No. 200 sieve ($35°$, $\gamma = 110$ pcf)	30	75	47	83
Moderately compacted select granular backfill ($35°$, $\gamma = 120$ pcf)	32	78	51	87
Moderately compacted clay backfill from on-site materials ($28°$, $\gamma = 130$ pcf)	47	87	69	98

It may not be feasible or practical to use free-draining granular backfill as recommended above. If on-site material from the excavations is used for backfill, it is recommended that the equivalent fluid unit weight values for moderately compacted clay backfill be used for the design of the walls. For the equivalent fluid unit weights to be applicable to a particular soil type, the backfill using the particular soil type should at least fill a zone outside the wall defined by the wall and a line which rises from the base of the wall at an angle of $45 + \phi/2$ degrees from the horizontal. Where more than one soil type exists within this zone, the largest equivalent fluid unit weight should be used. If the wall is restrained at the top and bottom, the "at rest" condition should be used. If the wall is allowed to yield at least 0.1 percent of the height of the wall, the equivalent active condition may be used. If cohesive soils are used for backfill, free draining granular backfill should be placed a minimum of one foot beyond the outer edge of the foundation slab and be placed to within two feet of exterior grade and covered with cohesive soil. The cohesive soils should be sloped away from the structure to provide positive drainage.

7.4 EXCAVATION CONSIDERATIONS

Prior to construction, all topsoil and vegetation should be removed from the area of the proposed pump station. When excavating for foundations or utility installations, it is recommended that the excavations be cut flat and have an essentially level bottom undisturbed by the method of excavation, or for structures founded on sand deposits, the bottom of the excavations should be compacted with a vibratory compactor if loosened by the excavation operations.

The bottoms of the excavations should be kept essentially dry; excavations extending below the water table into sand, silt or gravel deposits can develop a "quick condition" when the confining effect of the of the overburden is removed. To prevent this occurrence, areas of proposed excavation may need to be dewatered

and the water level maintained a minimum of three feet below the bottom of the proposed excavation during construction.

All excavations should comply with applicable local, state, and federal safety regulations including the current OSHA Excavation and Trench Safety Standards. Construction site safety generally is the sole responsibility of the contractor, who shall also be solely responsible for the means, methods, and sequencing of construction operations. Where excavations exceed five feet in depth, the side slopes may be sloped or shored to protect workers entering the excavation. Where excavations extended to a depth of more than ten (10) feet, it may be necessary to have the side slopes designed by a professional engineer, as per OSHA regulations.

The above information is provided only for general guidance. Under no circumstances should the information provided be interpreted to mean that anyone other than the construction contractor assumes responsibility for construction site safety. The Contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom.

7.5 GROUNDWATER CONSIDERATIONS

Seepage was first encountered during drilling in boring SB-2-P at a depth of approximately 26 to 28 feet below the existing ground surface. Groundwater levels were observed at a depth of approximately 31.3 feet in boring SB-P-2. However, groundwater may be encountered at other locations on the site of the proposed work that were not disclosed by the borings. Due to the granular layers encountered 16 to 21 feet below the existing ground surface, seepage from seasonal and/or perched water may be encountered during construction. Consequently, the contractor should be prepared to deal with any seepage and precipitation that enters the excavations. In areas where groundwater is anticipated, a dewatering system should be used to lower the groundwater level in the immediate vicinity of the excavations at least three feet below the bottom of the excavations to avoid “quick” condition.

8.0 CLOSING REMARKS

We appreciate the opportunity to be of service to you on this project. Please do not hesitate to call if we may be of further assistance or if you have any questions concerning the exploration or the recommendations presented in this report.

Sincerely,

DLZ

J. Emma Anhofer
Geotechnical Engineer

Eric Tse, P.E.
Senior Geotechnical Engineer

APPENDIX

General Information
Legend Boring Log Terminology
Boring Location Plan
Boring Logs (2)
Laboratory Test Results

GENERAL INFORMATION
DRILLING PROCEDURES AND LOGS OF BORINGS

Drilling and sampling were conducted in accordance with procedures generally recognized and accepted as standardized methods of investigation of subsurface conditions concerning geotechnical engineering considerations. Borings were drilled with either a truck-mounted or ATV-mounted drill rig.

Drive split-barrel sampling was performed in 1.5 foot increments at intervals not exceeding 5 feet. In the event the sampler encountered resistance to penetration of 6 inches or less after 50 blows of the drop hammer, the sampling increment was discontinued. Standard penetration data were recorded and one or more representative samples were preserved from each sampling increment.

In borings where rock was cored, NXM or NQ size diamond coring tools were used.

In the laboratory all samples were visually classified by a geotechnical engineer. Moisture contents of representative fine-grained soil samples were determined. A limited number of samples, considered representative of foundation materials present, were selected for performance of grain-size analyses and plasticity characteristics tests. The results of these tests are shown on the boring logs.

The boring logs included in the Appendix have been prepared on the basis of the field record of drilling and sampling, and the results of the laboratory examination and testing of samples. Stratification lines on the boring logs indicating changes in soil stratigraphy represent depths of changes approximated by the driller, by sampling effort and recovery, and by laboratory test results. Actual depths to changes may differ somewhat from the estimated depths, or transitions may occur gradually and not be sharply defined. The boring logs presented in this report therefore contain both factual and interpretative information and are not an exact copy of the field log.

Although it is considered that the borings have disclosed information generally representative of site conditions, it should be expected that between borings conditions may occur which are not precisely represented by any one of the borings. Soil deposition processes and natural geologic forces are such that soil and rock types and conditions may change in short vertical intervals and horizontal distances.

Soil/rock samples will be stored at our laboratory for a period of six months. After this period of time, they will be discarded, unless notified to the contrary by the client.

LEGEND – BORING LOG TERMINOLOGY

Explanation of each column, progressing from left to right

1. Depth (in feet) – refers to distance below the ground surface.

2. Elevation (in feet) – is referenced to mean sea level, unless otherwise noted.

3. Standard Penetration (N) – the number of blows required to drive a 2-inch O.D., 1-3/8 inch I.D., split-barrel sampler, using a 140-pound hammer with a 30-inch free fall. The blows are recorded in 6-inch drive increments. Standard penetration resistance is determined from the total number of blows required for one foot of penetration by summing the second and third 6-inch increments of an 18-inch drive.

   50/n – indicates number of blows (50) to drive a split-barrel sampler a certain number of inches (n) other than the normal 6-inch increment.

4. The length of the sampler drive is indicated graphically by horizontal lines across the "Standard Penetration" and "Recovery" columns.

5. Sample recovery from each drive is indicated numerically in the column headed "Recovery".

6. The drive sample location is designated by the heavy vertical bar in the "Sample No., Drive" column.

7. The length of hydraulically pressed "Undisturbed" samples is indicated graphically by horizontal lines across the "Press" column.

8. Sample numbers are designated consecutively, increasing in depth.

9. Soil Description

   a. The following terms are used to describe the relative compactness and consistency of soils:

   Granular Soils – Compactness

Term	Blows/Foot Standard Penetration
Very Loose	0 – 4
Loose	4 – 10
Medium Dense	10 – 30
Dense	30 – 50
Very Dense	over 50

   Cohesive Soils – Consistency

Term	Unconfined Compression tons/sq.ft.	Blows/Foot Standard Penetration	Hand Manipulation
Very Soft	less than 0.25	below 2	Easily penetrated by fist
Soft	0.25 – 0.50	2 – 4	Easily penetrated by thumb
Medium Stiff	0.50 – 1.0	4 – 8	Penetrated by thumb with moderate pressure
Stiff	1.0 – 2.0	8 – 15	Readily indented by thumb but not penetrated
Very Stiff	2.0 – 4.0	15 – 30	Readily indented by thumb nail
Hard	over 4.0	over 30	Indented with difficulty by thumb nail

   b. Color – If a soil is a uniform color throughout, the term is single, modified by such adjective as light and dark. If the predominant color is shaded by a secondary color, the secondary color precedes the primary color. If two major and distinct colors are swirled throughout the soil, the colors are modified by the term "mottled".

   c. Texture is based on the Unified Soil Classification System (USCS) ASTM-2487. Soil particle size definitions are as follows:

Description		Size	Description		Size
Boulders		Larger than 8"	Sand	– Coarse	4.76 mm to 2.0 mm
Cobbles		8" to 3"		– Medium	2.0 mm to 0.42 mm
Gravel	– Coarse	3" to 0.75"		– Fine	0.42 mm to 0.074 mm
	– Fine	0.75" to 0.1875"	Silt		0.074 mm to 0.005 mm
			Clay		smaller than 0.005 mm

d. The main soil component is listed first. The minor components are listed in order of decreasing percentage of particle size.

e. Moisture content of **cohesionless soils** (sands and gravels) is described as follows:

Term	Relative Moisture or Appearance
Dry	No moisture present
Damp	Internal moisture, but none to little surface moisture
Moist	Free water on surface
Wet	Voids filled with free water

f. The moisture content of **cohesive soils** (silts and clays) is expressed relative to plastic properties.

Term	Relative Moisture or Appearance
Dry	Powdery
Damp	Moisture content slightly below plastic limit
Moist	Moisture content above plastic limit but below liquid limit
Wet	Moisture content above liquid limit

10. Rock Hardness and Rock Quality Designation

a. The following terms are used to describe the relative hardness of the **bedrock**.

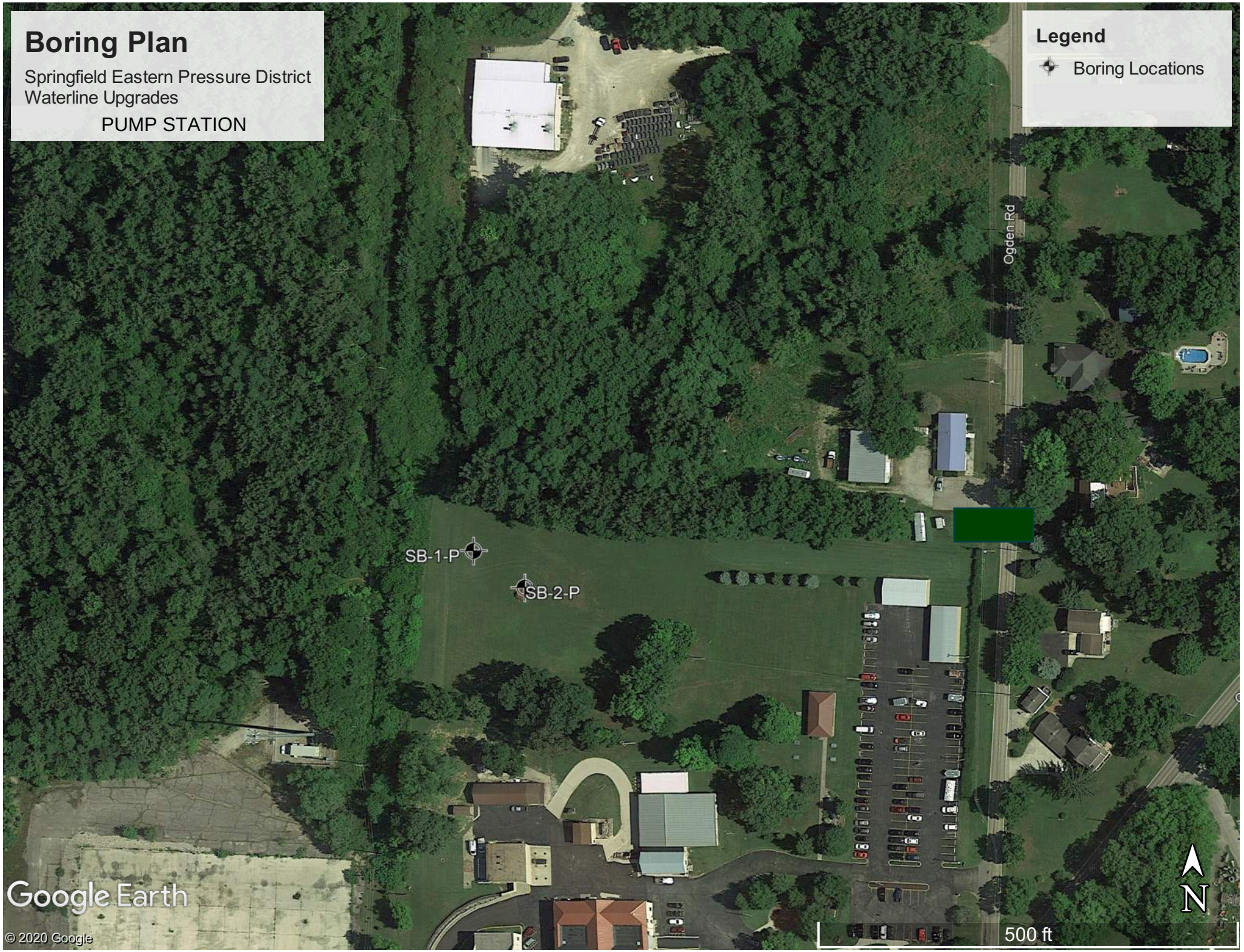
Term	Description
Very Soft	Permits denting by moderate pressure of the fingers. Resembles hard soil but has rock structure. (Crushes under pressure of fingers and/or thumb)
Soft	Resists denting by fingers, but can be abraded and pierced to shallow depth by a pencil point. (Crushes under pressure of pressed hammer)
Medium Hard	Resists pencil point, but can be scratched with a knife blade. (Breaks easily under single hammer blow, but with crumbly edges.)
Hard	Can be deformed or broken by light to moderate hammer blows. (Breaks under one or two strong hammer blow, but with resistant sharp edges.)
Very Hard	Can be broken only by heavy and in some rocks repeated hammer blows.

b. Rock Quality Designation, RQD – This value is expressed in percent and is an indirect measure of rock soundness. It is obtained by summing the total length of all core pieces which are at least four inches long, and then dividing this sum by the total length of the core run.

11. Gradation – when tests are performed, the percentage of each particle size is listed in the appropriate column (defined in Item 9c).

12. When a test is performed to determine the natural moisture content, liquid limit moisture content, or plastic limit moisture content, the moisture content is indicated graphically.

13. The corrected standard penetration (N_{60}) value in blows per foot is indicated graphically.


Boring Plan
Springfield Eastern Pressure District
Waterline Upgrades
PUMP STATION
Legend
Boring Locations
Ogden Rd
SB-1-P
SB-2-P
Google Earth
© 2020 Google
N
500 ft

DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess and Niple | *Project:* SEPD Pump Station | *Job No.* 2021-3007.00

LOG OF: Boring SB-1-P | *Location:* As per plan | *Date Drilled:* 4/13/2020

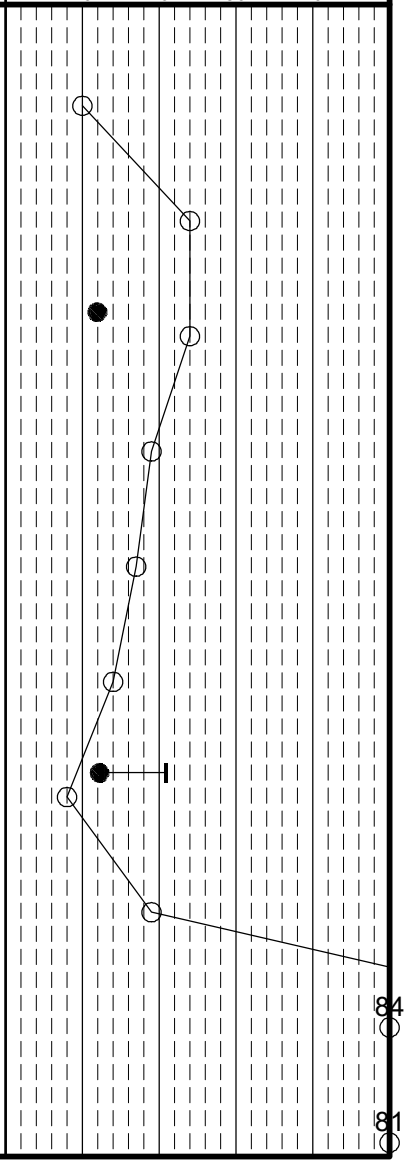
Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Natural Moisture Content, % - ●
PL ⊢—⊣ LL
N_{60} Value - ○ / Non-Plastic - NP
10 20 30 40

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1023.0													
0.3	1022.7						Topsoil (4")							
		3 2 4	18	S-1		2.25	Very stiff brown LEAN CLAY (CL) with sand; damp.							
		6 7 8	18	S-2		3.25								
5														
		4 7 8	18	S-3		3.0								
		3 8 4	18	S-4		2.5								
10														
		4 5 6	18	S-5		2.75								
13.5	1009.5													
		3 4 5	18	S-6		2.5	Stiff to very stiff brownish gray sandy LEAN CLAY (CL); damp to moist.							
15														
		1 3 2	18	S-7		1.5			9	4	12	17	37	21
		WH 4 8	18	S-8		1.75	@ 18.5'-21.0', gray and brown							
20														
21.0	1002.0													
		14 25 28	16	S-9			Very dense brown silty SAND (SM) with gravel; damp.							
23.5	999.5													
		21 26 25	15	S-10			Very dense brown SAND (SW-SM) with silt; damp.							
25	998.0													



84

81

DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess and Niple | *Project:* SEPD Pump Station | *Job No.* 2021-3007.00

LOG OF: Boring SB-1-P | *Location:* As per plan | *Date Drilled:* 4/13/2020

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

Natural Moisture Content, % - ●
PL ⊢ LL
N_{60} Value - ○ / Non-Plastic - NP
10 20 30 40

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	N60
	998.0														
							Very dense brown SAND (SW-SM) with silt; damp. (continued)								
		13 22 17	16	S-11											62
28.5	994.5														
		21 25 21	18	S-12			Very dense brown sandy SILT (ML); moist to wet.								73
30															
31.0	992.0														
		17 22 47	18	S-13		4.5+	Hard gray LEAN CLAY (CL); damp.								110
33.5	989.5														
		24 36 40	18	S-14			Very dense brown silty SAND (SM); moist.								121
35.0 35	988.0														
							Bottom of Boring - 35.0'								
40															
45															
50															

Client: Burgess and Niple | *Project:* SEPD Pump Station | *Job No.* 2021-3007.00

LOG OF: Boring SB-2-P | *Location:* As per plan | *Date Drilled:* 4/13/2020

WATER OBSERVATIONS:
Water seepage at: 26.0'-28.5'
Water level at completion: 31.3'

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

Natural Moisture Content, % - ●
PL ⊢—⊣ *LL*
N_{60} *Value -* ○ / *Non-Plastic -* NP
10 20 30 40

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1025.0													
		3 3 4	18	S-1		2.25	Very stiff brown LEAN CLAY (CL); damp.							
3.5	1021.5													
5		3 4 4	18	S-2		1.5	Stiff to very stiff brown to brownish gray sandy LEAN CLAY (CL); damp.							
		5 9 8	18	S-3		2.5			6	4	12	18	37	23
10		9 10 13	18	S-4		4.0								
		6 8 9	18	S-5		4.0	@ 11.0'-13.5', gray							
15		10 8 8	3	S-6		4.0								
16.0	1009.0													
		3 4 3	9	S-7			Medium dense brown silty GRAVEL (GM) with sand; moist to wet.							
18.5	1006.5													
20		5 7 13	15	S-8		4.0	Hard brown sandy LEAN CLAY (CL); contains iron oxide staining, contains large gravel piece; moist.							
21.0	1004.0													
		6 4 16	13	S-9			Dense sandy SILT (ML); moist.							
23.5	1001.5													
		7 21 26	18	S-10			Very dense brown silty SAND (SM); damp to moist.							
25	1000.0													

DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess and Niple | *Project:* SEPD Pump Station | *Job No.* 2021-3007.00

LOG OF: Boring SB-2-P | *Location:* As per plan | *Date Drilled:* 4/13/2020

WATER OBSERVATIONS:
Water seepage at: 26.0'-28.5'
Water level at completion: 31.3'

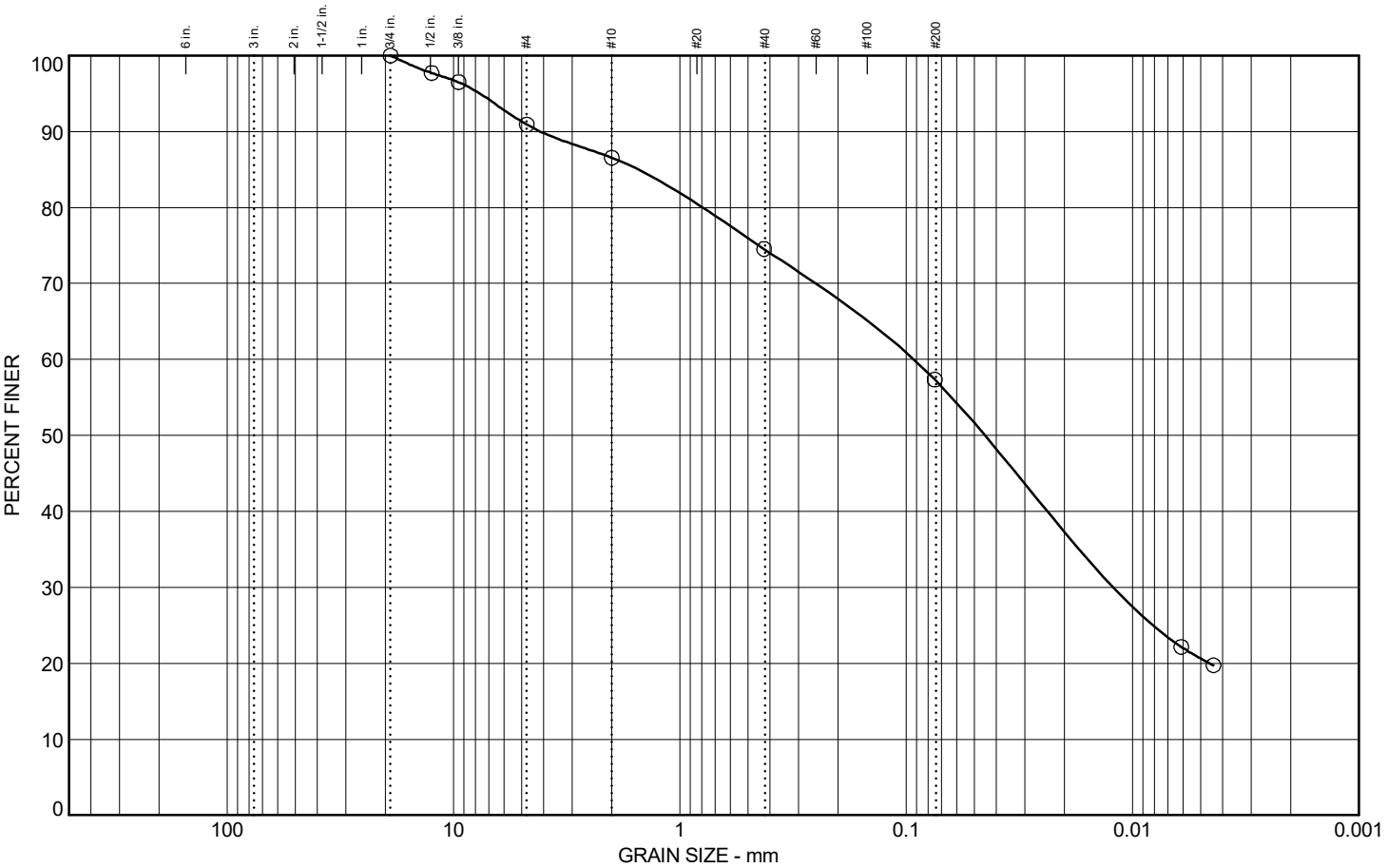
DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

Natural Moisture Content, % - ●
PL ⊢—⊣ *LL*
N_{60} *Value -* ○ / *Non-Plastic -* NP

Depth (ft)	Elev. (ft) 1000.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	N_{60} Value
							Very dense brown silty SAND (SM); damp to moist. (continued) ▼								
		15 23 25	16	S-11											76
28.5	996.5														
		18 24 25	18	S-12			Very dense brown sandy SILT (ML); wet.								78
30															
31.0	994.0														
		9 12 17	10	S-13			Dense gray SILT (ML); wet.								
33.5	991.5														
35.0	990.0	10 15 17	18	S-14		4.5+	Hard gray LEAN CLAY (CL); damp.								51
							Bottom of Boring - 35.0'								
40															
45															
50															

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	9.1	4.4	12.0	17.2	36.7	20.7

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
19	100.0		
12.5	97.7		
9.5	96.5		
4.75	90.9		
2	86.5		
0.425	74.5		
0.075	57.3		

* (no specification provided)

Soil Description

low plasticity clay, fine to medium sand

General Characteristics

Moisture Content = 12.2%

Atterberg Limits

LL= 21 PL= 12 PI= 9

Coefficients

D_{85}= 1.638 D_{60}= 0.098 D_{50}= 0.044
D_{30}= 0.011 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL AASHTO = A-4

Remarks

Group Index = 2

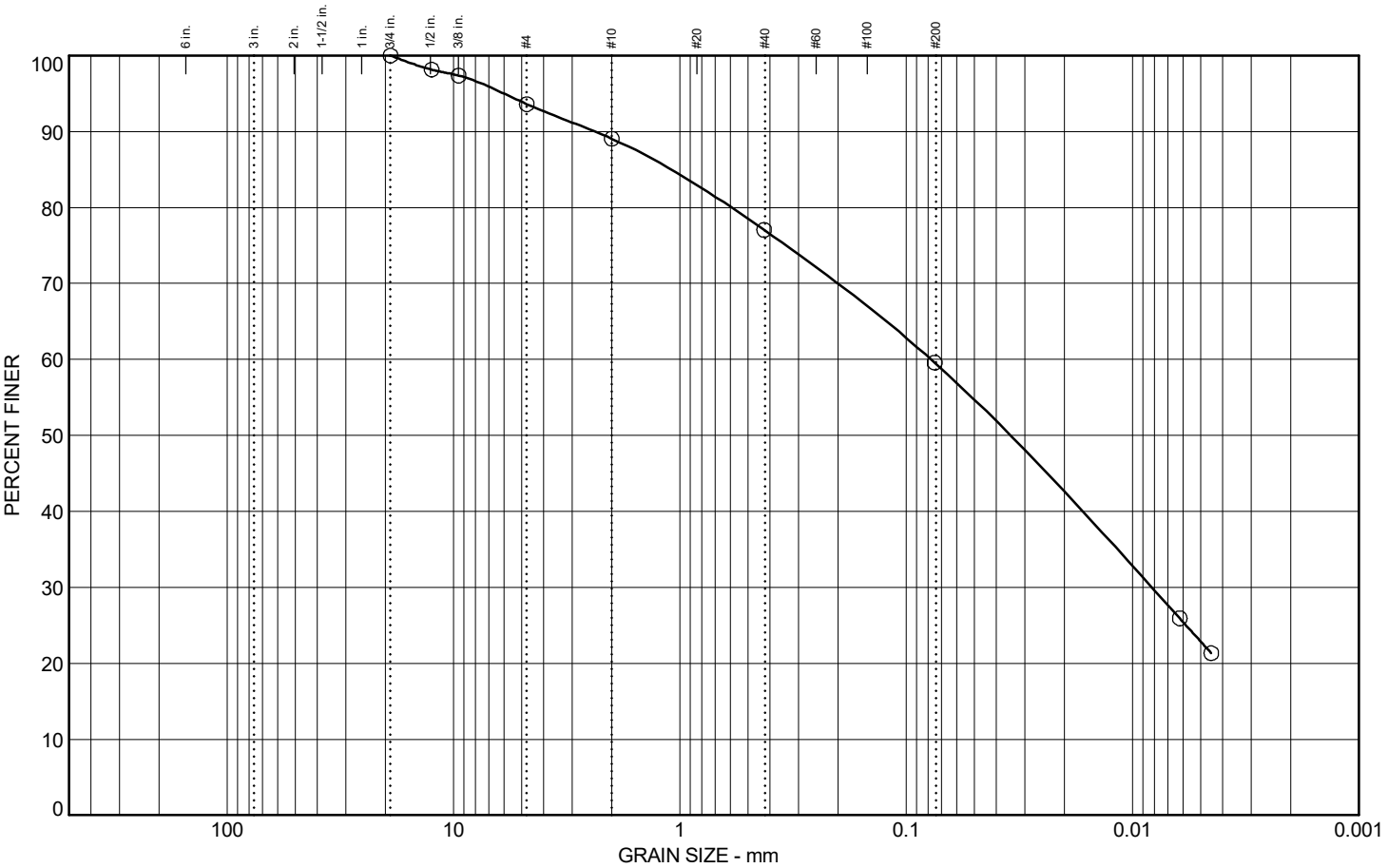
Sample No.: S-7 **Source of Sample:** SB-1-P **Date:**
Location: - **Depth / Elev:** 16' / 1007'

DLZ

Client: Burgess and Niple
Project: SEPD Pump Station
Project No: 2021-3007.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/28/20 15:28 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3007.00 SEPD PUMP STATION.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	6.4	4.5	12.0	17.5	36.7	22.8

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
19	100.0		
12.5	98.2		
9.5	97.4		
4.75	93.6		
2	89.1		
0.425	77.1		
0.075	59.6		

* (no specification provided)

Soil Description

low plasticity clay, fine to medium sand

General Characteristics

Moisture Content = 11.6%

Atterberg Limits

LL= 21 PL= 13 PI= 8

Coefficients

D_{85}= 1.185 D_{60}= 0.078 D_{50}= 0.037
D_{30}= 0.008 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL AASHTO = A-4

Remarks

Group Index = 2

Sample No.: S-3 **Source of Sample:** SB-2-P **Date:**
Location: - **Depth / Elev:** 6' / 1019'

DLZ

Client: Burgess and Niple
Project: SEPD Pump Station
Project No: 2021-3007.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/28/20 15:28 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3007.00 SEPD PUMP STATION.GPJ

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INNOVATIVE IDEAS
EXCEPTIONAL DESIGN
UNMATCHED CLIENT SERVICE

FINAL REPORT
OF
SUBSURFACE EXPLORATION

Eastern Pressure District Waterline Upgrades

City of Springfield,
Clark County, Ohio

Prepared For:

Burgess & Niple
5085 Reed Rd,
Columbus, OH 43220

Prepared By:

DLZ

DLZ OHIO, INC.

DLZ Job No. 2021-3006.00

August 21, 2020

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APPENDIX

General Information
Legend Boring Log Terminology
Boring Location Plan
Boring Logs (19)
Laboratory Test Results

1.0 INTRODUCTION

This report presents the findings of the subsurface exploration performed for the proposed Springfield, Ohio Eastern Pressure District Waterline Upgrades project which includes the design and construction of a new 24-inch watermain along E. National Road (US 40) which is connected to a 12-inch watermain along South Bird Road.

The purpose of this exploration was to 1) determine the subsurface conditions to the depths penetrated by the borings, 2) evaluate the engineering characteristics of the subsurface materials, and 3) determine potential design or construction problems related to the subsurface conditions.

The geotechnical engineer has planned and supervised the performance of the geotechnical engineering services, has considered the findings, and has prepared this report in accordance with generally accepted geotechnical engineering practices. No other warranties, either expressed or implied, are made as to the professional advice included in this report.

2.0 GENERAL PROJECT INFORMATION

The project site is located on the east side of the City of Springfield in Clark County, Ohio. It is our understanding that the waterline upgrades include a proposed 24-inch water main from a proposed pump station west of Ogden Road and running east along E National Road (US 40) between Old Columbus Road and Verona Drive. It also includes a proposed 12-inch water main along S Bird Road between US 40 and S. Charleston Pike/State Route 41 (S.R. 41). Reportedly, open excavation, jack and bore, and Horizontal Directional Drilling (HDD) methods may be used for construction of the proposed works. Recommendations made in this report are based on the invert elevations of the proposed waterline included in the Preliminary Plans titled “Eastern Pressure District Waterline Upgrades” provided to DLZ on February 18, 2020.

The recommendations presented in this report have been made based on the foregoing information. If the proposed location or design concepts are changed or differ from that assumed, DLZ should be informed of the changes so that recommendations and conclusions presented in this report may be revised as necessary.

3.0 SITE OBSERVATIONS AND GEOLOGY

A representative of DLZ completed field reconnaissance of the waterline alignment on March 18, 2020 in order to locate the borings and note any field conditions that would affect the field exploration or proposed improvements. Soft soil conditions were encountered at the surface in borings SB-02, SB-13, SB-14, SB-15, and SB-16A. Borings SB-05, SB-07, and SB-07A were located at intersections with an existing dense utility network. Borings SB-06, SB-07, SB-07A, SB-08, and SB-09 were located in the roadway ditch south of US-40. Cobbles were visible on the ground surface at the location of boring SB-10. Due to existing overhead utilities, SB-16 was relocated to be drilled in pavement of S Bird Road. The ditches off US-40 and S Bird Road were observed to be approximately 3 feet deep.

The project is located within the Mad River Interlobate Plain physiographic region of Ohio. According to resources published by the Ohio Division of Geological Survey (1998), the Mad River Interlobate Plain is an area between two major converging glacial lobes including extensive outwash, outwash terraces and bordering moraines. The topography is generally found to have moderate relief. The glacial deposits found in the area are reportedly high-lime Wisconsin-aged till with gravel outwash deposits. Till is typically an unsorted mix of silt, clay, sand, gravel, and boulders. Bedrock in the area generally consists of Silurian to Devonian-age carbonate rocks and is mapped at approximately 100 feet below the existing ground surface.

According to the Groundwater Resources Map of Clark County, Ohio (1982), the site is in an area of: 1) thick glacial drift yielding as much as 100 gallons per minute and 2) thin unconsolidated glacial deposits yielding 3 to 10 gallons per minute.

4.0 FIELD EXPLORATION

The field exploration consisted of drilling a total of nineteen (19) borings, designated as SB-01 through SB-16, as well as SB-04A, SB-07A, and SB-16A, located along Ogden Rd., Old Columbus Rd., US-40, Burma Rd. and S Bird Rd. The borings were drilled on April 8-10 and April 13-14, 2020. Each of the borings were drilled to depths ranging from 10 to 30 feet below the existing ground surface.

Borings SB-03, SB-04 and SB-04A were performed using a truck-mounted rotary drill rig. All other borings were performed using an ATV-mounted drill rig. The borings were advanced through the soil using 3.25-inch I.D. hollow stem augers. Disturbed split-spoon soil samples were obtained with a 2-inch OD split-barrel sampler in accordance with the Standard Penetration Test (ASTM D1586) at 2.5-foot intervals through the soil overburden to the completion depth of the borings. The hammer systems used on the truck-mounted and ATV-mounted drill rigs were calibrated on April 25, 2018 and April 26, 2018. The hammers had an average drill rod energy efficiency ratio (ER) of 87.1 percent and 95.2 percent respectively.

Groundwater was encountered in seven of the borings, and the measurements were recorded in each boring where groundwater was encountered during drilling and upon completion of drilling. Groundwater seepage was first encountered in the borings at depths ranging from 3.5 to 8.5 feet below the existing ground surface. The borings were backfilled with hole plug and soil cuttings after the final water level measurements were obtained. The approximate locations of the borings and the ground surface elevations at the boring locations were obtained from existing digital elevation models. A summary of the geotechnical field exploration can be found in the Appendix.

5.0 LABORATORY TESTING

The samples from the borings were returned to the laboratory where they were visually classified using the Unified Soil Classification System and logged by an engineer.

The following physical property laboratory tests were performed on selected soil samples:

- Natural water content (ASTM D 2216)
- Grain-size analysis (ASTM D 6913 and D 7928)
- Atterberg limits (ASTM D 4318)

In addition, chemical corrosion testing consisting of sulfate (TEX-145E), chloride (AASHTO T291), sulfide (EPA Method 9030), pH (ASTM G 51), and resistivity (ASTM G 187) were performed on selected bulk soil samples. The sulfide and chloride tests were performed by Advanced Analytics Laboratories, Inc., located in Columbus, Ohio. Additional chemical corrosion testing was performed in the field while drilling, including redox potential (ASTM D 1498) on selected soil samples near the anticipated invert elevation.

The results of the physical property tests are shown on the boring logs in the Appendix. Individual test reports are presented in the Appendix of this report. The results of the chemical tests are summarized in Table 1 of section 6.1 of this report and are presented in the Appendix.

6.0 FINDINGS

The subsurface conditions encountered in the borings generally consisted of very soft to hard low plasticity fine-grained material and loose to very dense granular material. None of the borings performed encountered bedrock. For more detailed information, please refer to the boring logs presented in the Appendix of this report. Please note that the strata contact lines shown on the boring logs represent approximate boundaries between soil types. In the field, the actual soil transition might be different both vertically and laterally.

6.1 SOIL CONDITIONS

At the ground surface, the borings generally encountered 2 to 6 inches of topsoil, with the exception of borings SB-04, SB-04A, and SB-16 which were drilled in the pavement. Borings SB-04 and SB-04A encountered 4.5 and 5 inches of asphalt, respectively, underlain by 6 inches of aggregate base, while SB-16 encountered 6 inches of asphalt underlain by 18 inches of aggregate base.

Beneath the surficial materials at the surface, borings B-06 and B-08 encountered fill or possible fill to depths of approximately 3.5 feet below the existing ground surface. The fill or possible material varied from very stiff to hard low plasticity fine-grained material (USCS: CL). Natural soils encountered at the surface or below the surficial and/or fill/possible fill materials generally consisted of very soft to hard low plasticity fine-grained soils (USCS: CL, CL-ML) and loose to very dense granular soils (USCS: SM, SP-SM, SW-SM, SC, SC-SM, SP, GP-GM, and GM).

Bulk samples from borings SB-01, SB-04, SB-06, SB-09, SB-11, SB-13, SB-15, SB-16A were tested for sulfate, sulfide, chloride, and resistivity. Redox potential and pH tests were performed on soil samples at depths of approximately 5 feet for borings SB-01, SB-04, SB-06, SB-09, SB-11, SB-13, SB-15, SB-16A as well. The soil samples consisted of cohesive soil (USCS: CL and CH) and granular soils (USCS: SM and SC). The samples were

analyzed for redox potential (ASTM D 1498), sulfate (TEX-145-E), pH (ASTM D4972), and resistivity (ASTM G 187) at DLZ's Columbus laboratory and were analyzed for sulfide (EPA Method 9030) and chloride (AASHTO T291) at Advanced Analytics Labs Inc., Columbus, Ohio. The results of the corrosion testing are presented in Table 1 and on individual laboratory reports in the Appendix.

Table 1: Soil Sample Chemical and Resistivity Test Results with Corrosion Rating

Boring ID	Sample Depth	Sample Class.	Redox Test Results	Sulfate Concentration (ppm)	pH in Water	Sulfide (mg/kg)	Chloride (mg/kg)	Resistivity (Ω-cm)	Sample Moisture	AWWA Corrosion Rating[1]
SB-01	0'-5'	CL	215 mV 13.9° C	240	8	320	ND	3,140	Poor 14%	5.5
SB-04	0'-5'	SM	204 mV 16.8° C	<100	8.8	200	14.2	6,260	Poor 3%	8.5
SB-06	0'-5'	CL	243 mV 16.4° C	110	8.5	240	24.8	2,860	Poor	6.5
SB-09	0'-5'	SM	238 mV 14.1 ° C	100	8.9	120	10.6	6,660	Poor 5%	8.5
SB-11	0'-5'	CL	302 mV 12.4° C	190	8.5	200	ND	3,310	Poor 21%	5.5
SB-13	0'-5'	CL	246 mV 13.6 ° C	160	8.7	160	3.54	4,620	Poor 13%	8.5
SB-15	0'-5'	CL	198 mV 13.4° C	<100	8.5	240	ND	4,160	Poor 12%	5.5
SB-16A	0'-5'	CL-ML	208 mV 12.8° C	200	8.7	200	5.31	5,070	Poor 10%	8.5

[1]Ratings presented are based on moisture (drainage), pH, sulfide, resistivity, and redox potential test results (AWWA C105/A21.5-10 Table A.1 Soil-test Evaluation)

The corrosion test results of the samples were compared to the American Water Works Association (AWWA) numerical soil corrosivity scale, applicable to cast iron alloys (AWWA C-105/A21.5-18 Standard). The corrosion severity is rated by assigning points for different variables including resistivity, pH, redox potential, sulfides, and moisture. When the points total of a soil in the AWWA scale equals ten (or higher), corrosion protective measures (such as cathodic protection) have been recommended for cast iron alloys. The corrosion rating points assigned to the bulk soil samples from 8 borings along the proposed watermain alignment including borings SB-01, SB-04, SB-06, SB-09, SB-11, SB-13, SB-15, and SB-16A are shown in Table 1. Results of the ranking

indicate that the soils at the test locations of the borings are not corrosive to ductile iron pipe and protection is not needed (i.e., less than 10 points). It should be noted that the characteristics of the soils may vary in areas not disclosed by the borings and that 4 of the 8 borings tested were rated at 8.5 points, close to the threshold.

6.2 GROUNDWATER CONDITIONS

Seepage was encountered during drilling in borings B-04A at 3.5 feet below the existing ground surface, borings SB-04, SB-11, SB-12, and SB-15 at 6.0 feet, and in borings SB-07 and SB-07A at 8.5 feet. Groundwater levels were observed at depths of 6.9, 6.5, 8.6, 4.1, 7.8, 10.0, and 10.0 feet in borings SB-04A, SB-04, SB-11, SB-12, SB-15, SB-07, and SB-07A, respectively.

It should be noted that groundwater levels may fluctuate with seasonal variations and following periods of heavy or prolonged precipitation. During construction or at other times during the project life, water levels may be higher or lower than observed at the time of this subsurface exploration.

7.0 CONCLUSIONS AND RECOMMENDATIONS

7.1 GENERAL CONSIDERATIONS

Reportedly, open excavation and trenchless (i.e., HDD, horizontal auger boring, pipe ramming, pipe jacking, etc.) installation methods may both be used for the installation of the proposed water main.

Design of trenchless pipe installation, such as HDD, is beyond the scope of this exploration. The recommendations presented are general and do not replace any existing manuals or standards pertaining to the HDD. It is the Contractor's responsibility to ensure that all relevant laws, standards and specifications are adhered to during the work with the use of appropriate trenchless installation methods.

7.2 TRENCHLESS CONSTRUCTION CONSIDERATIONS

It is understood that trenchless methods such as HDD and jack and bore, along with open cut installation, are being considered for the construction of the proposed water main. It is the Contractor's responsibility to ensure that all relevant laws, standards, and specifications are adhered to during the work with the use of the selected trenchless installation methods.

With the HDD method, a small rotating and steerable drill bit is launched from the surface or an excavated shaft and is used to drill a pilot hole supported with drilling fluid or wash pipe. Once the pilot bore is completed, the drill head is replaced with a reamer that enlarges the drilled hole. This reaming may be carried out in one or more stages. Once the desired size is reached, the pipe is attached to the reaming head and pulled through the hole.

Horizontal Directional Drilling (HDD) methods may be used for installation of the proposed water main crossing South Bird Road. Borings SB-07 and SB-07A were drilled at the proposed crossing location. Boring SB-07

generally encountered very soft to medium stiff lean clay while boring SB-07A encountered stiff to very stiff sandy lean clay from the existing ground surface to the depth of approximately 3.5 feet, followed by fill soils consisting of loose to medium dense sands (SC, SP-SM). Given the project information available, the anticipated invert of the proposed crossing is approximately 5 feet below the existing ground surface at the boring locations. Consequently, very soft to soft lean clay and loose sands are anticipated during the HDD operations.

Difficulties and substantial problems may occur with HDD methods in soft fine-grained soils, organic deposits, loose sands, gravelly sands, gravels, cobbles, boulders, obstructions, and slightly weathered to unweathered rocks. Given the boring information, it is likely that soft fine-grained soils and loose sands will be encountered during construction. Additionally, it is probable that other problematic materials may also be encountered in areas not disclosed by the borings. Consequently, the Contractor should be equipped with proper drilling equipment (e.g. drill head) to advance the bore through possible obstructions and be prepared to deal with rock and gravelly soil conditions.

Pipes used for Horizontal Directional Drilling (HDD) are specialized. They should be capable of withstanding all forces imposed upon them during construction as well as final in-place loading conditions. All pipes must be able to withstand compressive and tensile loadings greater than the pulling loads anticipated on the works.

The Contractor should undertake all the necessary care and precautions to protect existing structures, utilities, and services in planning and execution of the work. The Contractor is also responsible for the identification and protection of utilities where these are crossed by construction activities. Where utilities and pipelines are involved, the Contractor should monitor ground settlement directly above, and at least 20 feet before and after, the utility or pipeline intersection.

For jack and bore locations, it is anticipated that temporary shoring and other construction features (thrust blocks, etc.) will be designed by others for the access pits. Designers should consider the estimated strength of the soils revealed by the borings and the potential to encounter elevated groundwater and seepage. Several borings encountered isolated, wet, and weak granular zones along the proposed alignment. It should be anticipated that these granular zones, as well as other sand seams not revealed by the borings, will likely require dewatering efforts in order to maintain a stable excavation. The water level should be maintained a minimum of three feet below the bottom of the excavations on the interior of the shoring throughout construction.

7.3 EXCAVATION CONSIDERATIONS

Prior to construction, all topsoil and vegetation should be removed from the area of the proposed water main. When excavating for foundations or utility installations, it is recommended that the excavations be cut flat and have an essentially level bottom undisturbed by the method of excavation, or for structures founded on sand deposits, the bottom of the excavations should be compacted with a vibratory compactor if loosened by the excavation operations.

The bottoms of the excavations should be kept essentially dry; excavations extending below the water table into sand, silt or gravel deposits can develop a “quick condition” causing the soils to “flow” or “run” when the confining effect of the of the overburden is removed. To prevent this occurrence, areas of proposed excavation may need to be dewatered and the water level maintained a minimum of three feet below the bottom of the proposed excavation during construction.

All excavations should comply with applicable local, state, and federal safety regulations including the current Occupational Safety and Health Administration (OSHA) Excavation and Trench Safety Standards. Construction site safety is the sole responsibility of the contractor, who shall also be solely responsible for the means, methods, and sequencing of construction operations. Where excavations exceed four feet in depth, the side slopes must be sloped or shored to protect workers entering the excavation. Where excavations extended to a depth of more than ten (10) feet with variable conditions, including, but not limited to, soil and loading conditions, it may be necessary to have the side slopes designed by a professional engineer, as per OSHA regulations.

Sheet piling may be considered for temporary support of the excavations for the proposed waterline access pits. Vibrations caused by driving sheet piling could adversely affect nearby structures. If sheet piling is used, a pre-construction survey should be performed on all existing structures within 100 feet of the excavations. It is the contractor’s responsibility to monitor and prevent any detrimental surface settlements or ground movements caused by installing sheet piling.

The above information is provided only for general guidance. Under no circumstances should the information provided be interpreted to mean that anyone other than the construction contractor assumes responsibility for construction site safety. The Contractor is solely responsible for designing and constructing stable, temporary excavations and should shore, slope, or bench the sides of the excavations as required to maintain stability of both the excavation sides and bottom.

7.4 GROUNDWATER CONSIDERATIONS

Seepage was encountered during drilling in borings B-04A at 3.5 feet below the existing ground surface, borings SB-04, SB-11, SB-12, and SB-15 at 6.0 feet, and in borings SB-07 and SB-07A at 8.5 feet. Groundwater levels were observed at depths of 6.9, 6.5, 8.6, 4.1, 7.8, 10.0, and 10.0 feet in borings SB-04A, SB-04, SB-11, SB-12, SB-15, SB-07, and SB-07A, respectively. However, groundwater may be encountered at other locations along the alignment of the proposed works that were not disclosed by the borings. Due to the granular layers encountered, seepage from seasonal and/or perched water may be encountered during construction. Consequently, the contractor should be prepared to deal with any seepage and precipitation that enters the excavations. In areas where groundwater is anticipated, a dewatering system should be used to lower the groundwater level in the immediate vicinity of the excavations at least three feet below the bottom of the excavations to avoid “quick” conditions. The construction contractor should consider consulting with a dewatering specialist prior to beginning construction.

8.0 CLOSING REMARKS

We appreciate the opportunity to be of service to you on this project. Please do not hesitate to call if we may be of further assistance or if you have any questions concerning the exploration or the recommendations presented in this report.

Sincerely,

DLZ

J. Emma Anhofer
Geotechnical Engineer

Eric Tse, P.E.
Senior Geotechnical Engineer

APPENDIX

General Information
Legend Boring Log Terminology
Boring Location Plan
Boring Logs (19)
Laboratory Test Results

GENERAL INFORMATION
DRILLING PROCEDURES AND LOGS OF BORINGS

Drilling and sampling were conducted in accordance with procedures generally recognized and accepted as standardized methods of investigation of subsurface conditions concerning geotechnical engineering considerations. Borings were drilled with either a truck-mounted or ATV-mounted drill rig.

Drive split-barrel sampling was performed in 1.5 foot increments at intervals not exceeding 5 feet. In the event the sampler encountered resistance to penetration of 6 inches or less after 50 blows of the drop hammer, the sampling increment was discontinued. Standard penetration data were recorded and one or more representative samples were preserved from each sampling increment.

In borings where rock was cored, NXM or NQ size diamond coring tools were used.

In the laboratory all samples were visually classified by a geotechnical engineer. Moisture contents of representative fine-grained soil samples were determined. A limited number of samples, considered representative of foundation materials present, were selected for performance of grain-size analyses and plasticity characteristics tests. The results of these tests are shown on the boring logs.

The boring logs included in the Appendix have been prepared on the basis of the field record of drilling and sampling, and the results of the laboratory examination and testing of samples. Stratification lines on the boring logs indicating changes in soil stratigraphy represent depths of changes approximated by the driller, by sampling effort and recovery, and by laboratory test results. Actual depths to changes may differ somewhat from the estimated depths, or transitions may occur gradually and not be sharply defined. The boring logs presented in this report therefore contain both factual and interpretative information and are not an exact copy of the field log.

Although it is considered that the borings have disclosed information generally representative of site conditions, it should be expected that between borings conditions may occur which are not precisely represented by any one of the borings. Soil deposition processes and natural geologic forces are such that soil and rock types and conditions may change in short vertical intervals and horizontal distances.

Soil/rock samples will be stored at our laboratory for a period of six months. After this period of time, they will be discarded, unless notified to the contrary by the client.

LEGEND – BORING LOG TERMINOLOGY

Explanation of each column, progressing from left to right

1. Depth (in feet) – refers to distance below the ground surface.

2. Elevation (in feet) – is referenced to mean sea level, unless otherwise noted.

3. Standard Penetration (N) – the number of blows required to drive a 2-inch O.D., 1-3/8 inch I.D., split-barrel sampler, using a 140-pound hammer with a 30-inch free fall. The blows are recorded in 6-inch drive increments. Standard penetration resistance is determined from the total number of blows required for one foot of penetration by summing the second and third 6-inch increments of an 18-inch drive.

   50/n – indicates number of blows (50) to drive a split-barrel sampler a certain number of inches (n) other than the normal 6-inch increment.

4. The length of the sampler drive is indicated graphically by horizontal lines across the "Standard Penetration" and "Recovery" columns.

5. Sample recovery from each drive is indicated numerically in the column headed "Recovery".

6. The drive sample location is designated by the heavy vertical bar in the "Sample No., Drive" column.

7. The length of hydraulically pressed "Undisturbed" samples is indicated graphically by horizontal lines across the "Press" column.

8. Sample numbers are designated consecutively, increasing in depth.

9. Soil Description

   a. The following terms are used to describe the relative compactness and consistency of soils:

   Granular Soils – Compactness

Term	Blows/Foot Standard Penetration
Very Loose	0 – 4
Loose	4 – 10
Medium Dense	10 – 30
Dense	30 – 50
Very Dense	over 50

   Cohesive Soils – Consistency

Term	Unconfined Compression tons/sq.ft.	Blows/Foot Standard Penetration	Hand Manipulation
Very Soft	less than 0.25	below 2	Easily penetrated by fist
Soft	0.25 – 0.50	2 – 4	Easily penetrated by thumb
Medium Stiff	0.50 – 1.0	4 – 8	Penetrated by thumb with moderate pressure
Stiff	1.0 – 2.0	8 – 15	Readily indented by thumb but not penetrated
Very Stiff	2.0 – 4.0	15 – 30	Readily indented by thumb nail
Hard	over 4.0	over 30	Indented with difficulty by thumb nail

   b. Color – If a soil is a uniform color throughout, the term is single, modified by such adjective as light and dark. If the predominant color is shaded by a secondary color, the secondary color precedes the primary color. If two major and distinct colors are swirled throughout the soil, the colors are modified by the term "mottled".

   c. Texture is based on the Unified Soil Classification System (USCS) ASTM-2487. Soil particle size definitions are as follows:

Description		Size	Description		Size
Boulders		Larger than 8"	Sand	– Coarse	4.76 mm to 2.0 mm
Cobbles		8" to 3"		– Medium	2.0 mm to 0.42 mm
Gravel	– Coarse	3" to 0.75"		– Fine	0.42 mm to 0.074 mm
	– Fine	0.75" to 0.1875"	Silt		0.074 mm to 0.005 mm
			Clay		smaller than 0.005 mm

d. The main soil component is listed first. The minor components are listed in order of decreasing percentage of particle size.

e. Moisture content of **cohesionless soils** (sands and gravels) is described as follows:

Term	Relative Moisture or Appearance
Dry	No moisture present
Damp	Internal moisture, but none to little surface moisture
Moist	Free water on surface
Wet	Voids filled with free water

f. The moisture content of **cohesive soils** (silts and clays) is expressed relative to plastic properties.

Term	Relative Moisture or Appearance
Dry	Powdery
Damp	Moisture content slightly below plastic limit
Moist	Moisture content above plastic limit but below liquid limit
Wet	Moisture content above liquid limit

10. Rock Hardness and Rock Quality Designation

a. The following terms are used to describe the relative hardness of the **bedrock**.

Term	Description
Very Soft	Permits denting by moderate pressure of the fingers. Resembles hard soil but has rock structure. (Crushes under pressure of fingers and/or thumb)
Soft	Resists denting by fingers, but can be abraded and pierced to shallow depth by a pencil point. (Crushes under pressure of pressed hammer)
Medium Hard	Resists pencil point, but can be scratched with a knife blade. (Breaks easily under single hammer blow, but with crumbly edges.)
Hard	Can be deformed or broken by light to moderate hammer blows. (Breaks under one or two strong hammer blow, but with resistant sharp edges.)
Very Hard	Can be broken only by heavy and in some rocks repeated hammer blows.

b. Rock Quality Designation, RQD – This value is expressed in percent and is an indirect measure of rock soundness. It is obtained by summing the total length of all core pieces which are at least four inches long, and then dividing this sum by the total length of the core run.

11. Gradation – when tests are performed, the percentage of each particle size is listed in the appropriate column (defined in Item 9c).

12. When a test is performed to determine the natural moisture content, liquid limit moisture content, or plastic limit moisture content, the moisture content is indicated graphically.

13. The corrected standard penetration (N_{60}) value in blows per foot is indicated graphically.

Boring Plan
Springfield Eastern Pressure District
Waterline Ugrades
Legend
Boring Locations
Holiday Hills
Hiliday Hills
Mallard Ave
Spinning Homestead Acres
Fernway Dr
Larchmont Dr
N Bird Rd
Eagle St
Redmond Rd
Ogden Rd
SB-01
Garden Acres
Redwood Blvd
Little Hollywood
Adlyn Rd
National Pl
Dynesville
SB-02
SB-03
SB-04
SB-04A
B-05
SB-06
B-07A
SB-07
B-08
U.S. 40
B-09
B-10
SB-11
Eastside Square
SB-12
Allium Ct
SB-13
Colonade Park
SB-14
Meadow Lane Estates
4th Ave
E Brent Dr
Meadow Ln
Veronia Dr
SB-15
East Lawn Heights
Sherwood Park
SB-16
Chick Dr
SB-16A
Kramer Rd
S Bird Rd
Titus Ln
Sun Valley Estates
Google Earth
© 2020 Google
N
4000 ft
Primeohio Corp

Boring Plan
Springfield Eastern Pressure District
Waterline Ugrades
Legend
Boring Locations
Suncrest Dr
Ogden Rd
SB-01
Garden Acres
Redwood Blvd
Larchmont Dr
Birch Rd
Hickory Dr
SB-02
SB-03
SB-04
SB-04A
B-05
SB-06
Maplewood Ave
quare
Meadow LA
Google Earth
© 2020 Google
N
1000 ft

Boring Plan
Springfield Eastern Pressure District
Waterline Ugrades
Legend
Boring Locations
National Pl
Dynesville
E National Rd
40
SB-06
SB-07
B-08
SB-11
Eastside Square
SB-12
SB-13
Colonade Park
SB-14
SB-15
Elbron Wood
awn Heights
Brust Dr
SB-16
41
E High St
SB-16A
S Bird Rd
Titus Ln
Google Earth
© 2020 Google
N
2000 ft

DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-01 | *Location:* As per plan | *Date Drilled:* 4/9/2020

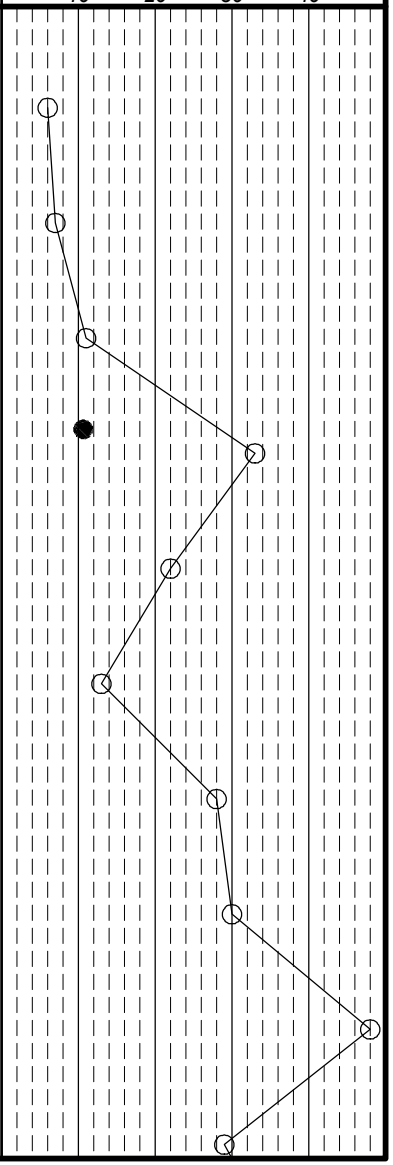
WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

Natural Moisture Content, % - ●
PL — LL
N_{60} Value - ○ / Non-Plastic - NP
10 20 30 40

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0.2	1041.8						Topsoil (2")							
		3 3 3	18	S-1		2.0	Very stiff brown LEAN CLAY (CL); damp.							
3.5	1038.5													
5		3 3 4	18	S-2		1.5	Stiff to very stiff brown LEAN CLAY (CL) with sand; contains piece of large gravel; damp.							
		3 4 7	18	S-3		4.0								
8.5	1033.5													
10		8 10 11	18	S-4			Very stiff brown sandy LEAN CLAY (CL); damp.		12	5	15	17	31	20
11.0	1031.0													
		9 10 12	13	S-5			Medium dense brown to light brown SAND (SW-SM) with silt and gravel; damp.							
15		4 6 7	16	S-6										
16.0	1026.0													
		6 13 15	15	S-7			Medium dense light brown SAND (SW-SM) with silt; damp.							
18.5	1023.5													
20		9 17 13	16	S-8			Medium dense to dense light brown SAND (SW-SM) with silt and gravel; damp.							
		13 25 23	11	S-9										
		13 15 14	17	S-10										
25	1017.0													



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-01 | *Location:* As per plan | *Date Drilled:* 4/9/2020

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

Depth (ft)	Elev. (ft) 1017.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
		22 20 17	16	S-11			Medium dense to dense light brown SAND (SW-SM) with silt and gravel; damp. (continued)							
		8 9 10	18	S-12										
30.0 30	1012.0						Bottom of Boring - 30.0'							
35														
40														
45														
50														

Natural Moisture Content, % - ●

PL — LL

N_{60} Value - ○ / Non-Plastic - NP

10 20 30 40

DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

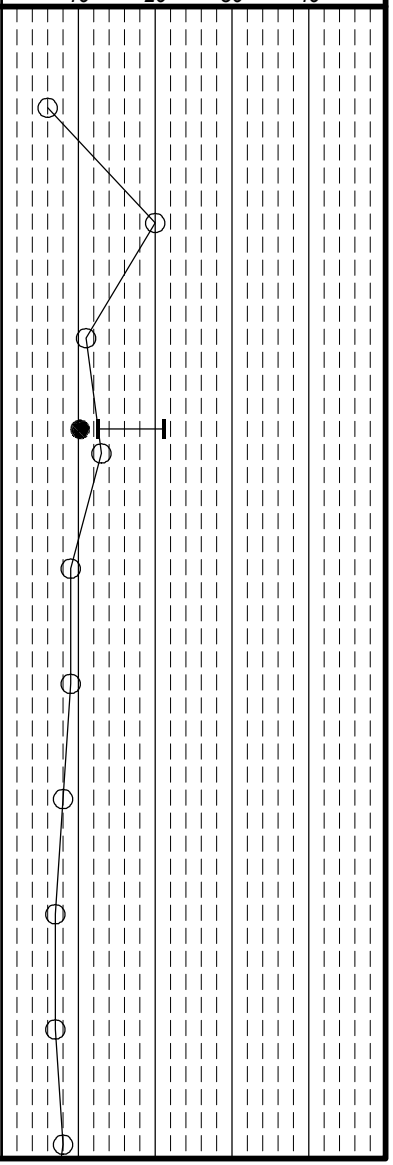
LOG OF: Boring SB-02 | *Location:* As per plan | *Date Drilled:* 4/15/2020

Rig (#) / ER - CME 55 (392265) / 95.2% | *Driller* TL | *Logger* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0.3	1035.7						Topsoil (4")							
		3 3 3	9	S-1		1.25	Stiff brown LEAN CLAY (CL) with sand; contains roots, slight organic odor; damp.							
3.5	1032.5													
		7 9 11	18	S-2		3.5	Hard brown sandy LEAN CLAY (CL); damp.							
5														
		3 5 6	18	S-3		3.5								
8.5	1027.5													
		4 5 8	18	S-4		3.0	Very stiff to hard brownish gray sandy LEAN CLAY (CL); damp to moist.		9	4	11	16	37	23
10														
		4 4 5	18	S-5		3.25								
		3 4 5	18	S-6		3.0								
15														
		3 3 5	18	S-7		2.75								
		3 3 4	18	S-8		2.25								
20														
		2 3 4	18	S-9		2.5								
		2 4 4	18	S-10		3.25								
25	1011.0													



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-02 | *Location:* As per plan | *Date Drilled:* 4/15/2020

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

Natural Moisture Content, % - ●
PL ⊢ LL
N_{60} Value - ○ / Non-Plastic - NP
10 20 30 40

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1011.0													
26.0	1010.0						Stiff brownish gray sandy LEAN CLAY (CL); damp to moist.							
		2 3 3	18	S-11		1.75								
		2 2 3	18	S-12		0.75								
30.0	1006.0						Bottom of Boring - 30.0'							

35 40 45 50

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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-03 | *Location:* As per plan | *Date Drilled:* 4/8/2020

Rig (#) / ER: - CME 55 (404135) / 87.1% | *Driller:* TL | *Logger:* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Natural Moisture Content, % - ●
PL ⟷ LL
N_{60} Value - ○ / Non-Plastic - NP
10 20 30 40

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1028.0													
		3 4 4	18	S-1		2.25	Very stiff dark brown LEAN CLAY (CL) with sand, contains slight organics, organic odor; damp.							
3.5	1024.5													
		4 9 3	15	S-2		3.0	Very stiff brown sandy LEAN CLAY (CL); moist.							
5														
		2 5 4	15	S-3		2.75								
8.5	1019.5													
		9 14 14	5	S-4		1.25	Stiff dark brown sandy LEAN CLAY (CL); contains organics and organic odor; contains roots; moist.							
10														
		9 12 13	4	S-5		1.0			1	3	17	17	42	20
13.5	1014.5													
		3 5 8	16	S-6		2.5	Very stiff to hard grayish brown LEAN CLAY (CL) with sand; damp to moist.							
15														
		7 9 13	18	S-7		4.25								
18.5	1009.5													
		8 8 11	18	S-8			Medium dense brown silty, clayey SAND (SC-SM); contains iron oxide staining; damp to moist.							
20														
21.0	1007.0													
		3 4 5	18	S-9			Loose light brown SAND (SP-SM) with silt; damp to moist.							
		10 17 24	18	S-10			@ 23.5'-25.0', dense							
25.0	1003.0						Bottom of Boring - 25.0'							
25														

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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

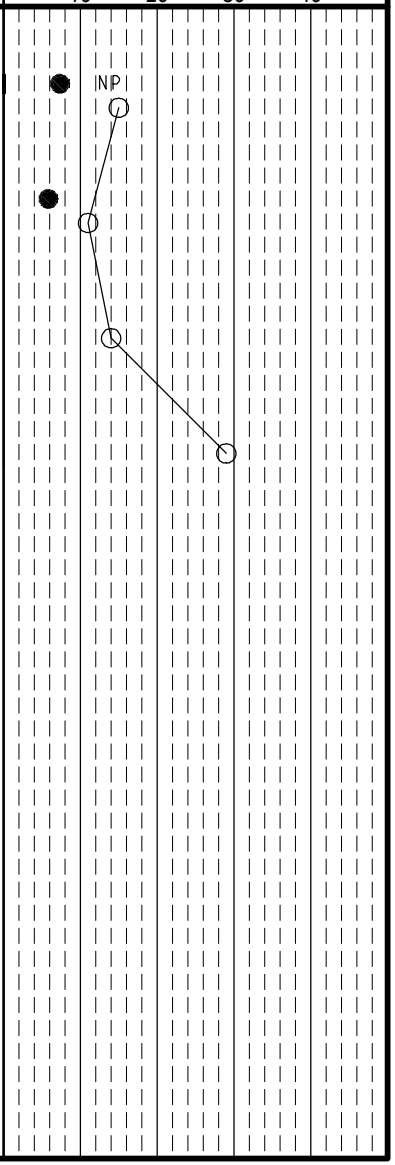
LOG OF: Boring SB-04 | *Location:* As per plan | *Date Drilled:* 4/8/2020

Rig (#) / ER - CME 55 (404135) / 87.1% | *Driller* TL | *Logger* AM

WATER OBSERVATIONS:
Water seepage at: 6.0'
Water level at completion: 6.5'

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Depth (ft)	Elev. (ft) 1061.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0.9	1060.1						Asphalt (4.5"), Aggregate base (6")							
		6 5 5	16	S-1			Loose to medium dense brown silty SAND (SM); contains iron oxide staining; damp.		14	11	23	23	21	8
3.5	1057.5													
5		5 5 6	14	S-2			Medium dense brown silty SAND (SM) with gravel; contains pyrite, contains iron oxide staining; moist.							
6.0	1055.0													
		5 8 6	7	S-3			Medium dense brown silty SAND (SM); wet.							
8.5	1052.5													
10.0 10	1051.0	5 9 11	11	S-4		4.5+	Hard light brown LEAN CLAY (CL) with sand; contains iron oxide staining, contains organic odor; damp.							
							Bottom of Boring - 10.0'							
15														
20														
25														



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

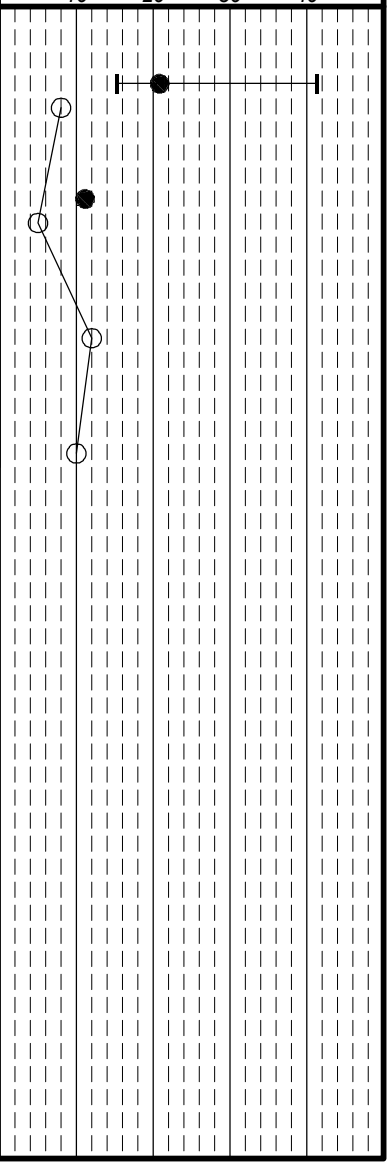
LOG OF: Boring SB-04A | *Location:* As per plan | *Date Drilled:* 4/8/2020

Rig (#) / ER: - CME 55 (404135) / 87.1% | *Driller:* TL | *Logger:* AM

WATER OBSERVATIONS:
Water seepage at: 3.5'
Water level at completion: 6.9'

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Depth (ft)	Elev. (ft) 1079.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ● PL / LL; N_{60} Value - ○ / Non-Plastic - NP
0.9	1078.1						Asphalt (5"), Aggregate base (6")								
		3 4 4	7	S-1		4.5+	Very stiff to hard brown and gray LEAN CLAY (CL) with sand; contains organic odor; moist.		1	1	7	16	38	37
3.5	1075.5														
		3 3 2	13	S-2		1.25	Medium stiff brown sandy LEAN CLAY (CL); wet.								
6.0	1073.0														
		5 6 6	16	S-3			Medium dense brown silty SAND (SM); wet.								
		4 6 4	18	S-4			@ 8.5'-10.0', contains iron oxide staining								
10.0	1069.0						Bottom of Boring - 10.0'								



DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-05 | *Location:* As per plan | *Date Drilled:* 4/10/2020

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

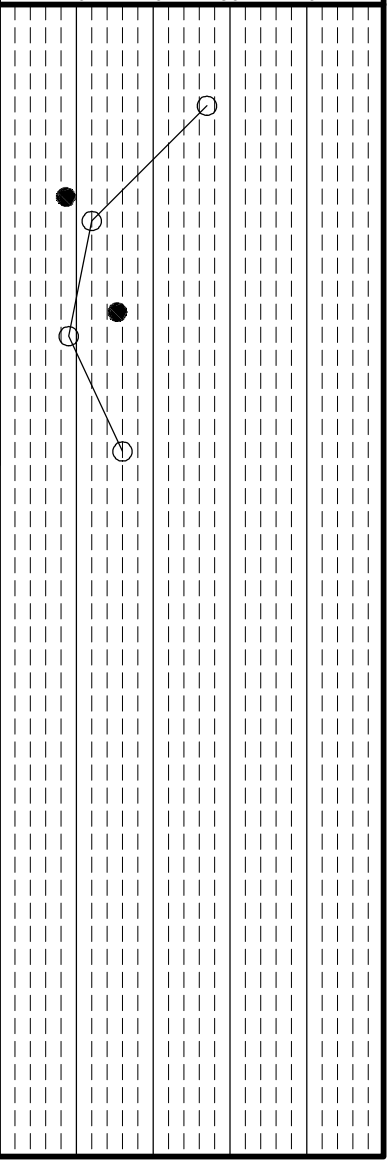
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1091.0													
		10 15 12	18	S-1			FILL: Medium dense brown and dark brown silty SAND (SM) with gravel; damp.							
3.5	1087.5													
5		5 6 6	17	S-2			Medium dense light brown clayey SAND (SC) with gravel; moist.							
6.0	1085.0													
		5 4 5	18	S-3		1.5	Very stiff light brown LEAN CLAY (CL) with sand; damp.							
10 10.0		5 6 10	18	S-4		3.5	@ 8.5'-10.0', contains iron oxide staining							
	1081.0						Bottom of Boring - 10.0'							
15														
20														
25														

Natural Moisture Content, % - ●

PL — LL

N_{60} *Value -* ○ / *Non-Plastic -* NP

10 20 30 40



DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-06 | *Location:* As per plan | *Date Drilled:* 4/10/2020

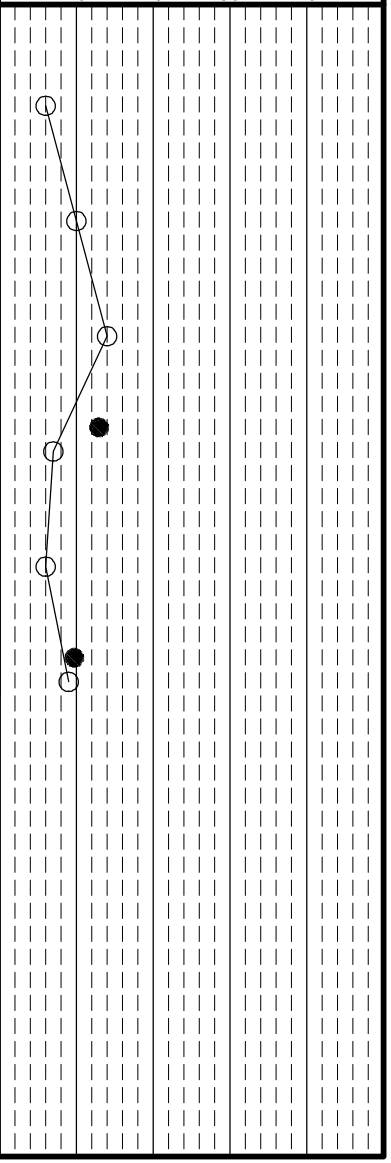
Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Depth (ft)	Elev. (ft) 1083.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
3.5	1079.5	2 3 3	18	S-1		2.0	Very stiff light yellowish brown LEAN CLAY (CL); contains organic odor; moist.							
6.0	1077.0	3 5 5	18	S-2		2.0	Very stiff light brown LEAN CLAY (CL) with sand; damp.							
8.5	1074.5	3 4 5	18	S-3			Loose light yellowish brown silty SAND (SM); moist.							
11.0	1072.0	3 3 4	18	S-4		0.75	Medium stiff brown LEAN CLAY (CL); moist.							
13.5	1069.5	3 3 3	18	S-5		0.5	Soft to medium stiff grayish brown LEAN CLAY (CL) with sand; contains organic odor; moist.							
15.0	1068.0	5 4 5	13	S-6		1.0	Medium stiff grayish brown sandy LEAN CLAY (CL); contains sand pocket; damp to moist.							
							Bottom of Boring - 15.0'							

Natural Moisture Content, % - ●
PL — LL
N_{60} Value - ○ / Non-Plastic - NP
10 20 30 40



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

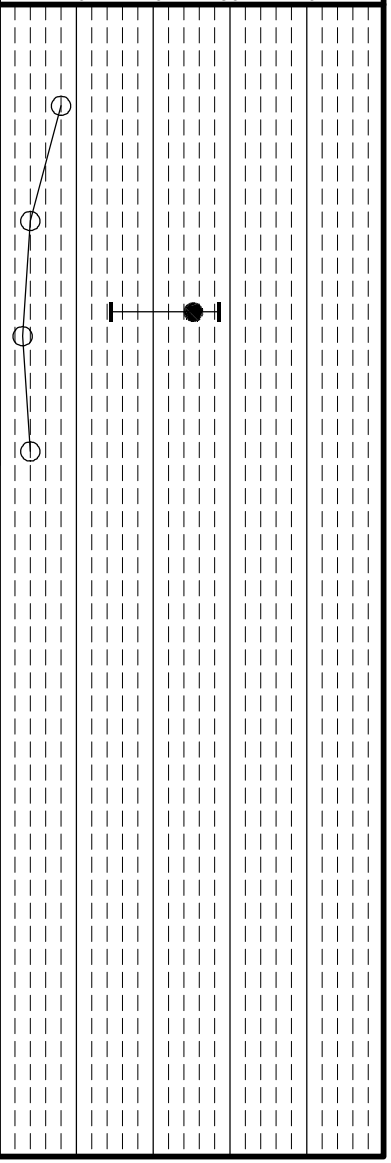
LOG OF: Boring SB-07 | *Location:* As per plan | *Date Drilled:* 4/10/2020

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

WATER OBSERVATIONS:
Water seepage at: 8.5'
Water level at completion: 10.0'

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Depth (ft)	Elev. (ft) 1074.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ● PL / LL / N_{60} Value - / Non-Plastic - NP
0.2	1073.8						Topsoil (2")								
		3 3 5	18	S-1		1.75	Stiff to medium stiff brown LEAN CLAY (CL); damp to moist. @ 0.17'-3.5', contains dark brown silt pockets								
		1 2 2	12	S-2		0.25									
6.0	1068.0														
		1 1 2	18	S-3		0.25	Soft to very soft brown LEAN CLAY (CL) with sand; moist to wet. ▼		6	4	10	18	35	27	
		2 2 2	18	S-4		<0.25									
10.0	1064.0						Bottom of Boring - 10.0'								



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-07A | *Location:* As per plan | *Date Drilled:* 4/10/2020

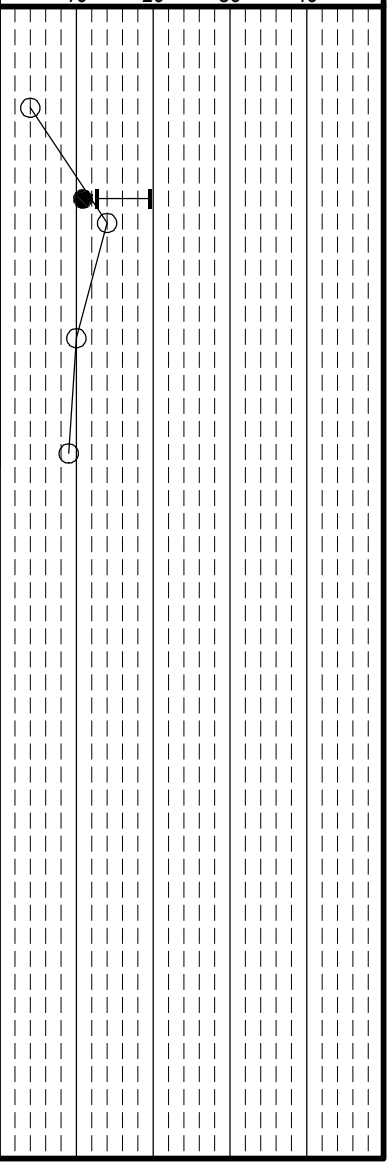
WATER OBSERVATIONS:
Water seepage at: 8.5'
Water level at completion: 10.0'

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

Natural Moisture Content, % - ●
PL ⊢ *LL*
N_{60} *Value -* ○ / *Non-Plastic -* NP
10 20 30 40

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1071.0													
		3 2 2	18	S-1		1.5	Stiff to very stiff brown sandy LEAN CLAY (CL); damp to moist.							
3.5	1067.5													
5		3 4 5	18	S-2			Loose brown clayey SAND (SC); damp.		11	6	13	21	33	16
6.0	1065.0													
		5 5 5	15	S-3			Medium dense light brown SAND (SP-SM) with silt; damp to moist.							
8.5	1062.5													
10.0 10	1061.0	3 5 4	16	S-4			Loose brown SAND (SP-SM) with silt; wet.							
							Bottom of Boring - 10.0'							
15														
20														
25														



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-08 | *Location:* As per plan | *Date Drilled:* 4/14/2020

Rig (#) / ER - CME 55 (392265) / 95.2% | *Driller* TL | *Logger* AM

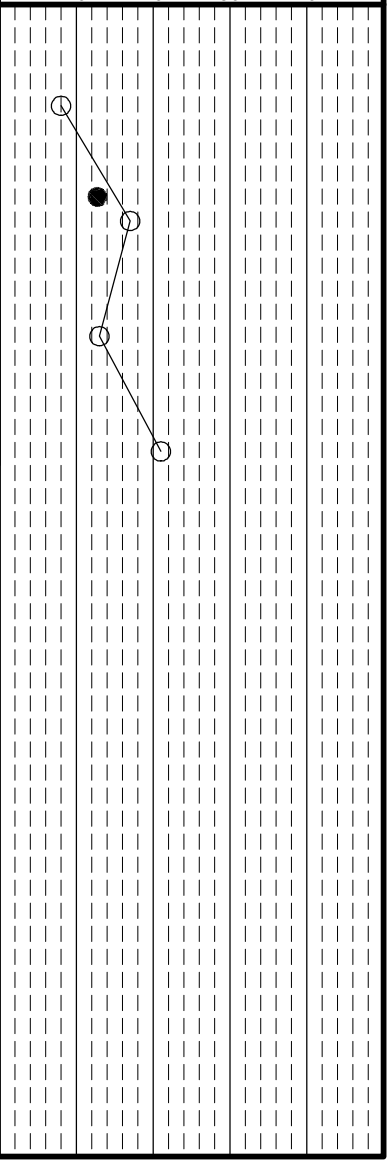
WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Depth (ft)	Elev. (ft) 1067.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
		3 4 4	18	S-1		1.75	POSSIBLE FILL: Very stiff dark brown LEAN CLAY (CL) with sand; contains wood and root fragments, contains organic odor; damp.							
3.5	1063.5													
		3 4 7	18	S-2			Medium dense brown and dark brown clayey SAND (SC); contains root fragments; moist.							
5 6.0	1061.0													
		5 6 7	18	S-3		3.5	Very stiff brown sandy LEAN CLAY (CL); damp to moist.							
		5 9 12	18	S-4		3.25								
10.0 10	1057.0						Bottom of Boring - 10.0'							
15														
20														
25														

Natural Moisture Content, % - ●

PL ⊢——⊣ LL
N_{60} Value - ○ / Non-Plastic - NP
10 20 30 40



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-09 | *Location:* As per plan | *Date Drilled:* 4/14/2020

Rig (#) / ER - CME 55 (392265) / 95.2% | *Driller* TL | *Logger* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Depth (ft)	Elev. (ft) 1054.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay	Natural Moisture Content, % - ● PL / LL / N_{60} Value - / Non-Plastic - NP (10 20 30 40)
0.2	1053.8						Topsoil (2")								
		3 4 7	4	S-1		1.75	Stiff dark brown sandy LEAN CLAY (CL); contains roots; damp.								
3.5	1050.5														
5		5 10 11	18	S-2			Medium dense brown SAND (SW-SM) with silt and gravel; moist.								
		5 8 7	18	S-3											
8.5	1045.5														
10.0 10	1044.0	9 7 10	18	S-4			Medium dense brown SAND (SW-SM) with silt; moist.								
							Bottom of Boring - 10.0'								

15 20 25

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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-10 | *Location:* As per plan | *Date Drilled:* 4/10/2020

Rig (#) / ER - CME 55 (392265) / 95.2% | *Driller* TL | *Logger* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

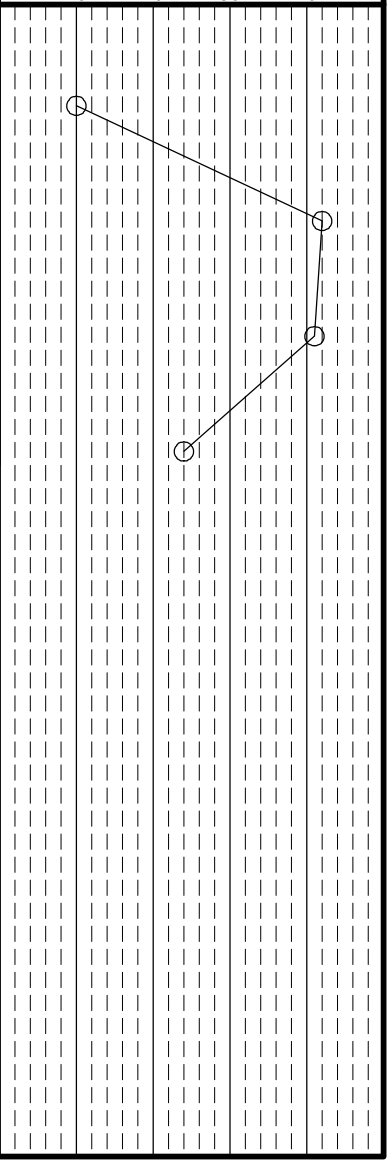
Depth (ft)	Elev. (ft) 1047.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0.5	1046.5						Topsoil (6")							
		6 5 5	18	S-1			Medium dense brown SAND (SP-SM) with silt; damp.							
3.5	1043.5													
5		10 15 27	9	S-2			Dense light brown and brown GRAVEL (GM) with sand; damp.							
6.0	1041.0													
		13 16 25	12	S-3			Dense light brown GRAVEL (GP-GM) with silt and sand; damp.							
8.5	1038.5													
10.0 10	1037.0	9 12 12	18	S-4			Medium dense light brown SAND (SW-SM) with silt and gravel; damp.							
							Bottom of Boring - 10.0'							
15														
20														
25														

Natural Moisture Content, % - ●

PL — LL

N_{60} *Value -* ○ / *Non-Plastic -* NP

10 20 30 40



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-11 | *Location:* As per plan | *Date Drilled:* 4/15/2020

Rig (#) / ER - CME 55 (392265) / 95.2% | *Driller* TL | *Logger* AM

WATER OBSERVATIONS:
Water seepage at: 6.0'
Water level at completion: 8.6'

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

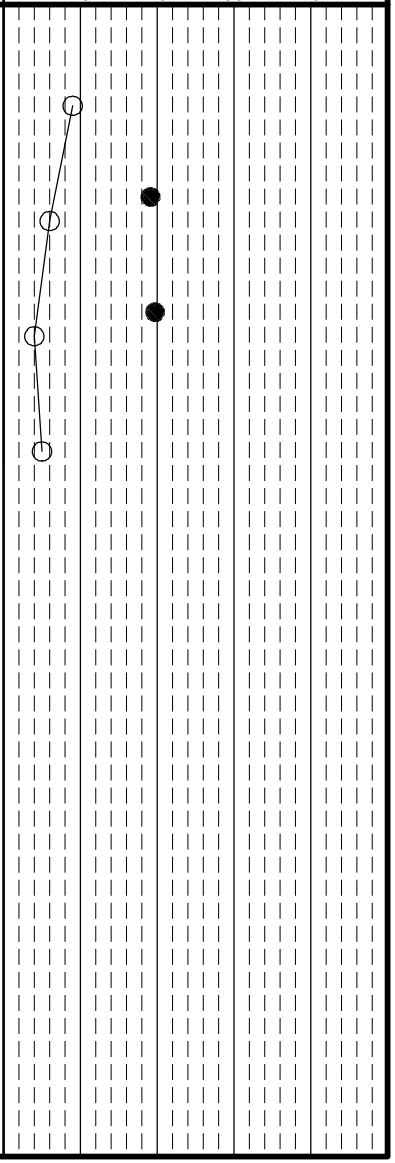
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1082.0													
		2 4 5	18	S-1		1.0	Stiff brown LEAN CLAY (CL); damp.							
3.5	1078.5													
5		2 3 3	18	S-2		0.5	Medium stiff brown LEAN CLAY (CL) with sand; moist.							
6.0	1076.0													
		1 2 2	18	S-3		0.25	Very soft brown sandy SILTY CLAY (CL-ML); wet.							
		2 2 3	18	S-4		<0.25								
10.0	1072.0						Bottom of Boring - 10.0'							
15														
20														
25														

Natural Moisture Content, % - ●

PL — LL

N_{60} *Value -* ○ / *Non-Plastic -* NP

10 20 30 40



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-12 | *Location:* As per plan | *Date Drilled:* 4/14/2020

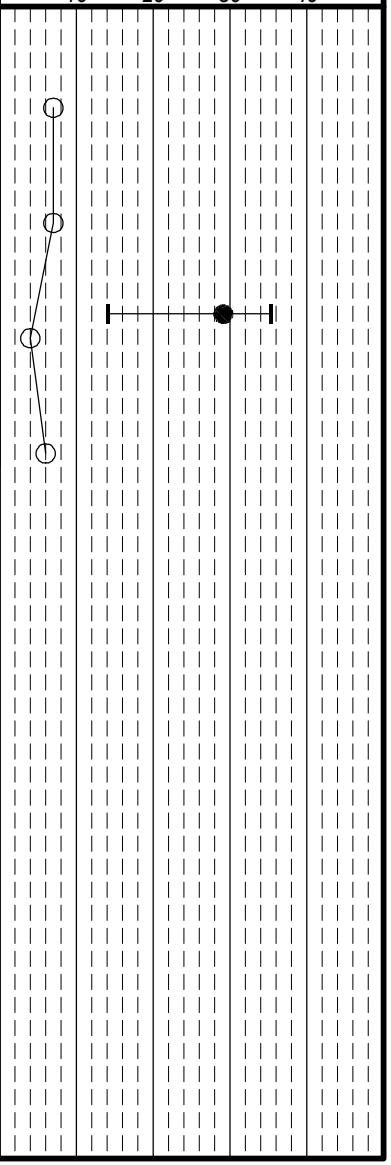
WATER OBSERVATIONS:
Water seepage at: 6.0'
Water level at completion: 4.1'

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

Natural Moisture Content, % - ●
PL ⊢——⊣ *LL*
N_{60} *Value -* ○ / *Non-Plastic -* NP
10 20 30 40

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1089.0													
		2 3 4	16	S-1		2.0	Stiff to very stiff brown to dark brown LEAN CLAY (CL); damp.							
		2 3 4	18	S-2		1.0	@ 3.5'-6.0', contains organic odor							
6.0	1083.0													
		2 2 2	18	S-3		0.5	Medium stiff brown sandy LEAN CLAY (CL); moist.		2	3	15	24	29	27
8.5	1080.5													
10.0	1079.0	3 2 2	18	S-4			Loose brown clayey SAND (SC); wet.							
							Bottom of Boring - 10.0'							



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-13 | *Location:* As per plan | *Date Drilled:* 4/14/2020

Rig (#) / ER - CME 55 (392265) / 95.2% | *Driller* TL | *Logger* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1098.0													
		4 4 6	15	S-1		0.75	Medium stiff brown sandy LEAN CLAY (CL); damp to moist.							
		5 6 8	18	S-2		1.75								
6.0	1092.0													
		8 12 15	18	S-3			Medium dense brown silty, clayey SAND (SC-SM) with gravel; moist.							
8.5	1089.5													
10.0	1088.0	4 7 6	18	S-4		3.0	Very stiff brown sandy LEAN CLAY (CL); damp to moist.							
							Bottom of Boring - 10.0'							

Natural Moisture Content, % - ●

PL — LL

N_{60} Value - ○ / Non-Plastic - NP

10 20 30 40

DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-14 | *Location:* As per plan | *Date Drilled:* 4/14/2020

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

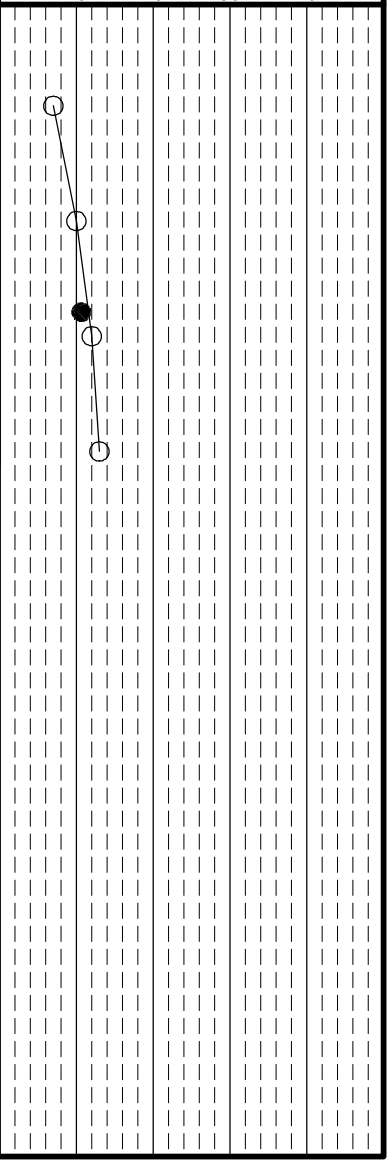
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1078.0													
		4 3 4	14	S-1		1.0	Stiff brown LEAN CLAY (CL) with sand; contains roots; damp to moist.							
		3 4 6	18	S-2		1.5								
6.0	1072.0													
		3 6 6	18	S-3		3.25	Very stiff brown sandy LEAN CLAY (CL); moist.							
		3 7 6	18	S-4		1.5								
10.0	1068.0						Bottom of Boring - 10.0'							

Natural Moisture Content, % - ●

PL — LL

N_{60} Value - ○ / Non-Plastic - NP

10 20 30 40



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Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-15 | *Location:* As per plan | *Date Drilled:* 4/14/2020

Rig (#) / ER - CME 55 (392265) / 95.2% | *Driller* TL | *Logger* AM

WATER OBSERVATIONS:
Water seepage at: 6.0'
Water level at completion: 7.8'

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

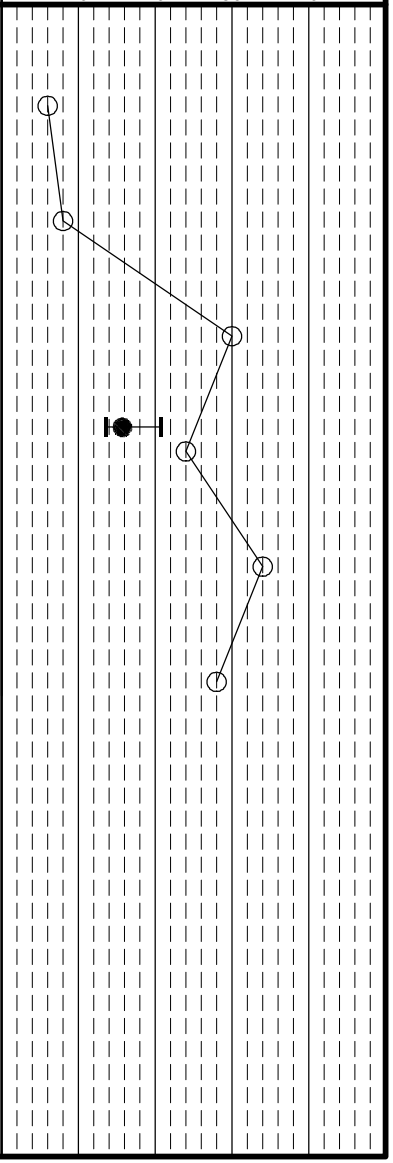
Depth (ft)	Elev. (ft) 1078.0	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
0.3	1077.7						Topsoil (4")							
		3 3 3	18	S-1		1.25	Stiff brown LEAN CLAY (CL) with sand; damp.							
		3 4 4	3	S-2		1.75								
6.0	1072.0													
		6 10 9	10	S-3			Medium dense brown silty SAND (SM); wet.							
8.5	1069.5													
		4 5 10	16	S-4			Medium dense brown sandy LEAN CLAY (CL); moist.		0	0	2	7	67	24
11.0	1067.0													
		10 15 19	15	S-5			Medium dense to dense brown silty GRAVEL (GM) with sand; wet.							
		10 13 15	18	S-6										
15.0	1063.0						Bottom of Boring - 15.0'							

Natural Moisture Content, % - ●

PL — LL

N_{60} Value - ○ / Non-Plastic - NP

10 20 30 40



DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

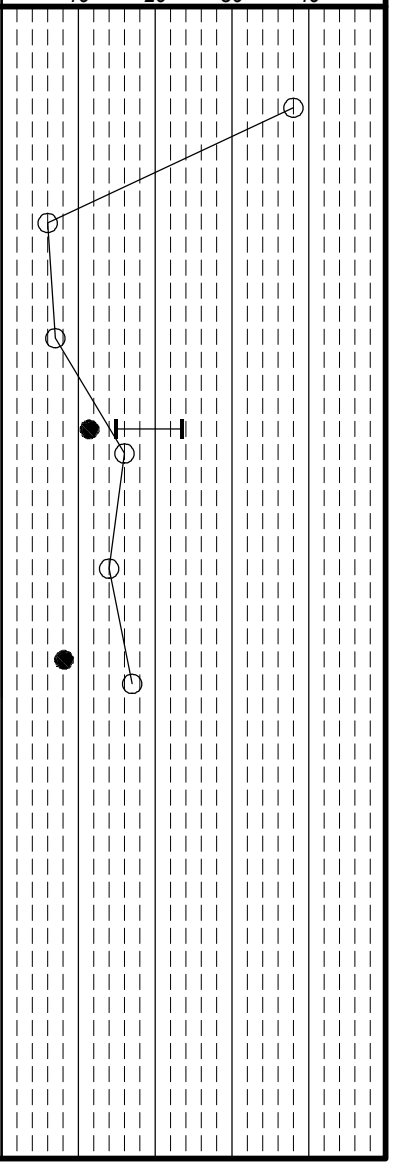
LOG OF: Boring SB-16 | *Location:* As per plan | *Date Drilled:* 4/15/2020

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	% Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1071.0													
							Asphalt (6"), Aggregate base (18")							
2.0	1069.0	13 21 17	18	S-1										
							Dense brown silty SAND (SM) with gravel; damp.							
3.5	1067.5													
		3 3 3	18	S-2		1.5	Stiff to very stiff dark brown and gray LEAN CLAY (CL) with sand; contains orange silt pockets, contains organics; damp.							
6.0	1065.0													
		2 3 4	16	S-3		1.25	Stiff to very stiff grayish brown LEAN CLAY (CL) with sand; damp.							
		3 5 5	18	S-4		2.25	@ 8.5'-15.0', dark brown; damp		5	3	12	17	36	27
		4 5 9	4	S-5		2.0								
		7 8 9	18	S-6		3.5								
15.0	1056.0													
							Bottom of Boring - 15.0'							



DLZ Ohio, Inc. * 6121 Huntley Road, Columbus, Ohio 43229 * (614) 888-0040

Client: Burgess & Niple | *Project:* SEPD Waterline | *Job No.* 2021-3006.00

LOG OF: Boring SB-16A | *Location:* As per plan | *Date Drilled:* 4/15/2020

Rig (#) / ER: - CME 55 (392265) / 95.2% | *Driller:* TL | *Logger:* AM

WATER OBSERVATIONS:
Water seepage at: None Observed
Water level at completion: None Observed

DRILLING METHODS - Soil: HS Augers
ABANDONMENT - hole plug and cuttings

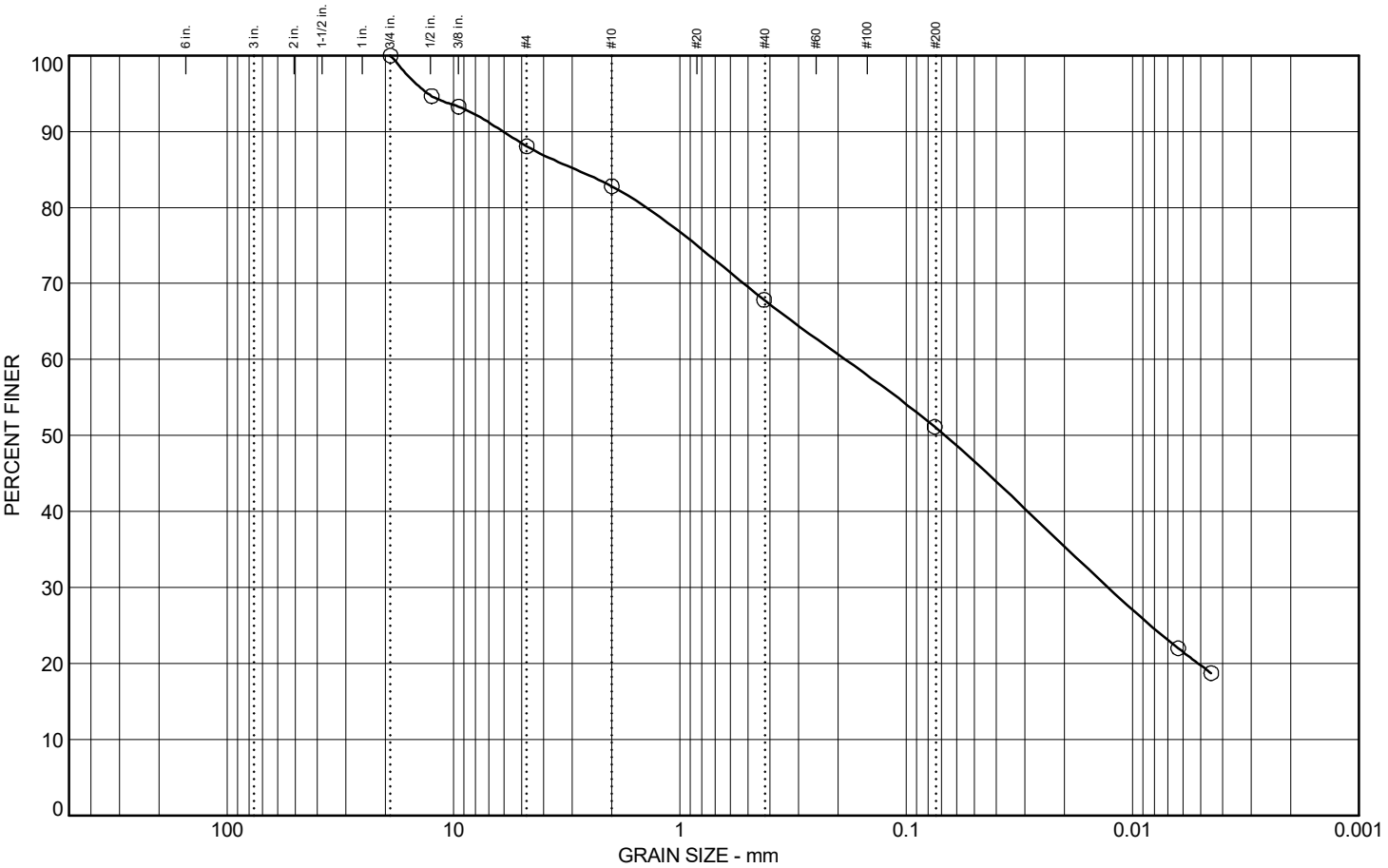
Depth (ft)	Elev. (ft)	Blows per 6"	Recovery (in)	Sample No. Drive	Sample No. Press / Core	Hand Penetrometer (tsf)	DESCRIPTION	Graphic Log	GRADATION % Aggregate	% C. Sand	% M. Sand	% F. Sand	% Silt	% Clay
	1070.0						Stiff light brown sandy SILTY CLAY (CL-ML); moist.							
		3 3 4	18	S-1		1.5	@ 1.0'-3.5', contains pyrite							
		3 4 4	18	S-2		2.0	@ 3.5'-6.0', contains iron oxide staining							
		7 11 16	13	S-3		2.75			9	5	15	19	33	19
		13 26 35	18	S-4		3.5								
11.0	1059.0													
		29 26 33	15	S-5			Very dense light brown SAND (SP) with gravel; contains stone fragments, contains pyrite; damp.							
13.5	1056.5													
15.0	1055.0	7 9 10	14	S-6			Medium dense light brown SAND (SP-SM) with silt and gravel; contains iron oxide staining, contains pyrite; damp.							
							Bottom of Boring - 15.0'							

Natural Moisture Content, % - ●

PL — LL
N_{60} Value - ○ / Non-Plastic - NP
10 20 30 40

61
59

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	12.0	5.3	15.0	16.7	31.4	19.7

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
19	100.0		
12.5	94.7		
9.5	93.3		
4.75	88.0		
2	82.8		
0.425	67.8		
0.075	51.1		

* (no specification provided)

Soil Description

General Characteristics

Moisture Content = 10.6%

Atterberg Limits

LL= PL= PI=

Coefficients

D_{85}= 2.875 D_{60}= 0.188 D_{50}= 0.068
D_{30}= 0.012 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = AASHTO =

Remarks

Group Index =

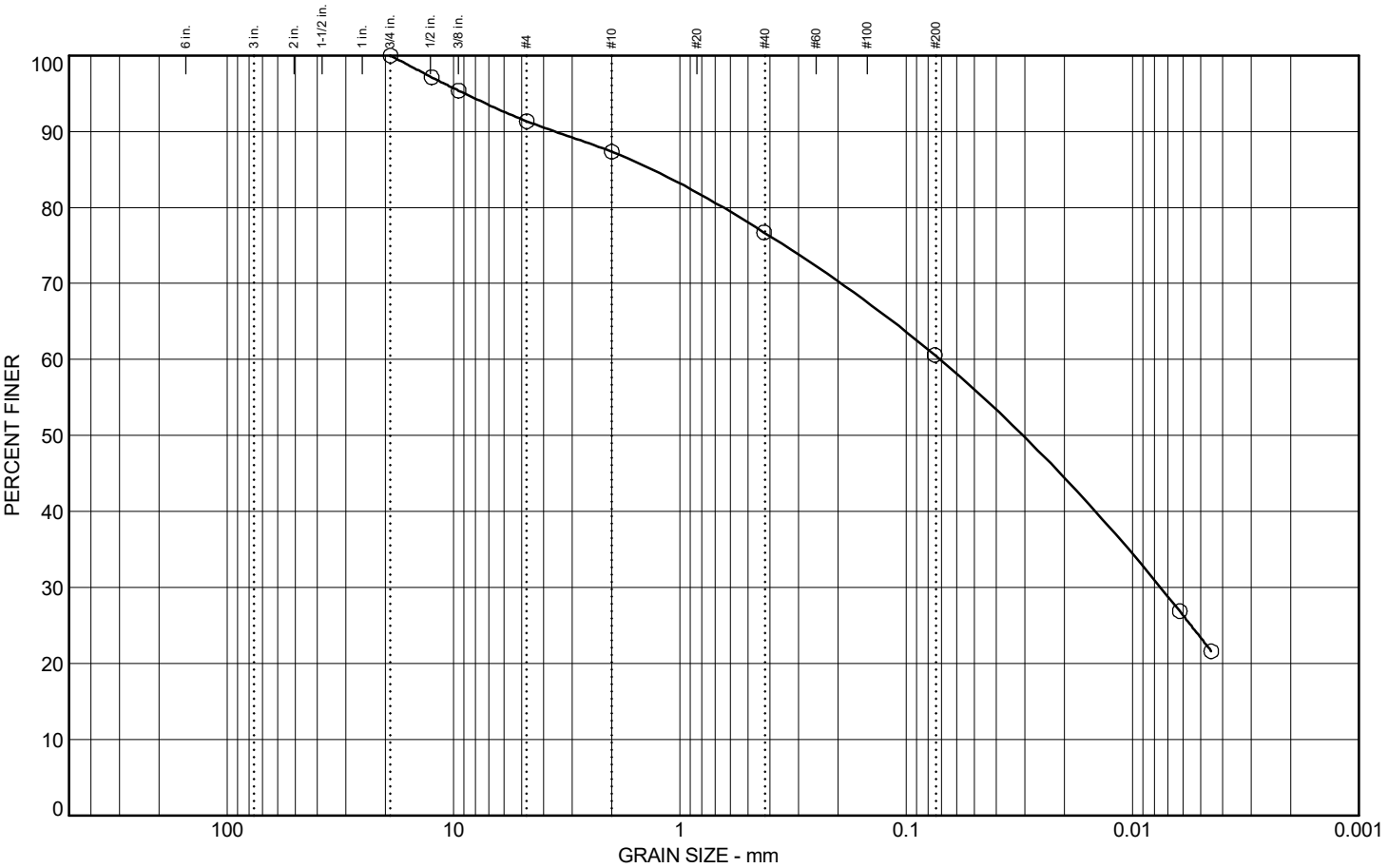
Sample No.: S-4 **Source of Sample:** SB-01 **Date:**
Location: - **Depth / Elev:** 8.5' / 1033.5'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:55 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	8.6	4.0	10.6	16.1	37.3	23.3

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
19	100.0		
12.5	97.1		
9.5	95.4		
4.75	91.4		
2	87.3		
0.425	76.7		
0.075	60.6		

* (no specification provided)

Soil Description

low plasticity clay, fine to medium sand

General Characteristics

Moisture Content = 10.2%

Atterberg Limits

LL= 21 PL= 12 PI= 9

Coefficients

D_{85}= 1.423 D_{60}= 0.072 D_{50}= 0.034
D_{30}= 0.008 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL AASHTO = A-4

Remarks

Group Index = 2

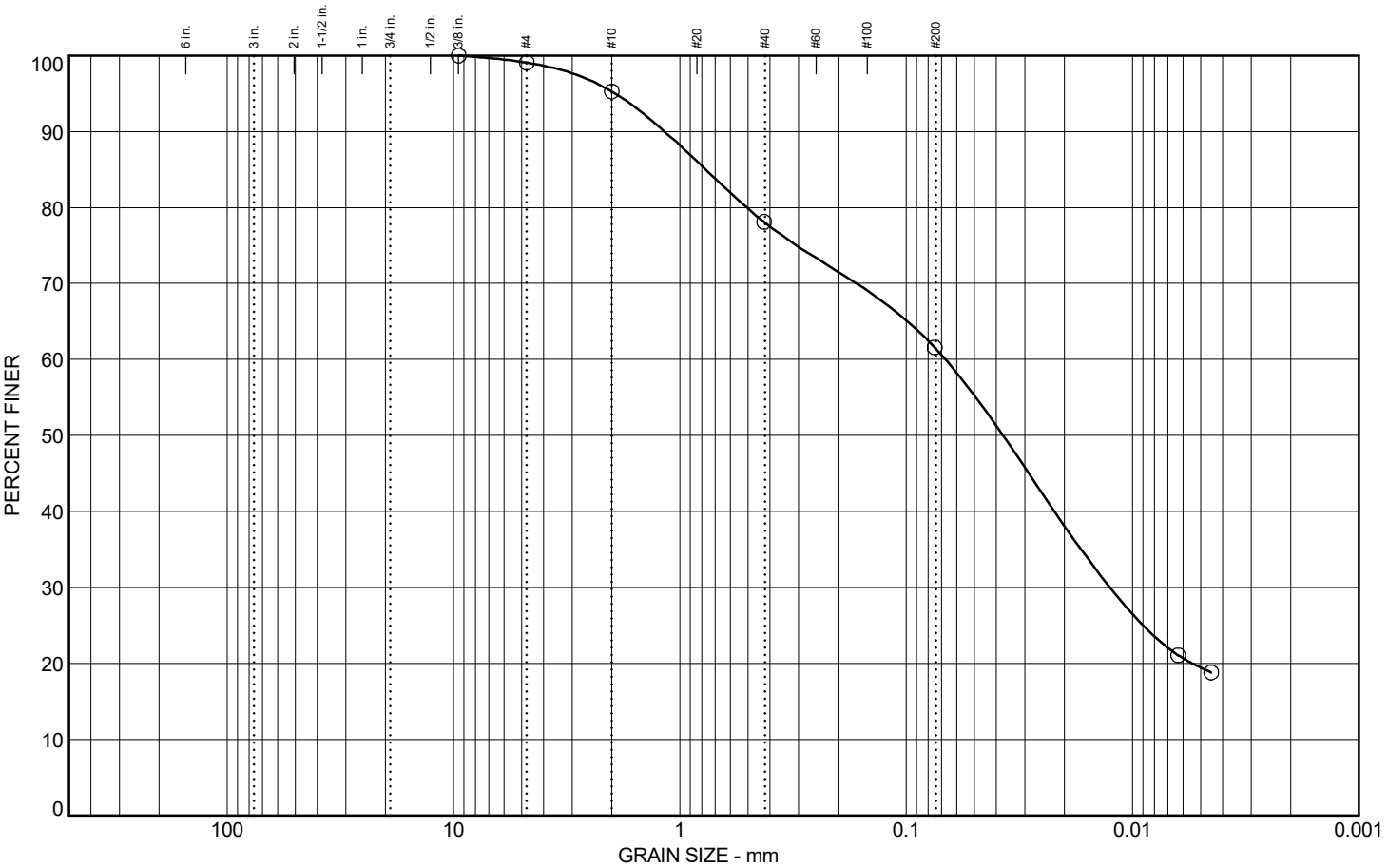
Sample No.: S-4 **Source of Sample:** SB-02 **Date:** 5/4/2020
Location: - **Depth / Elev:** 8.5' / 1027.5'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:55 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.9	3.8	17.2	16.5	42.1	19.5

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
9.5	100.0		
4.75	99.1		
2	95.3		
0.425	78.1		
0.075	61.6		

* (no specification provided)

Soil Description

low plasticity clay, fine to medium sand

General Characteristics

Moisture Content = 22.8%

Atterberg Limits

LL= 26 PL= 16 PI= 10

Coefficients

D_{85}= 0.791 D_{60}= 0.068 D_{50}= 0.037
D_{30}= 0.011 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL AASHTO = A-4

Remarks

Group Index = 4

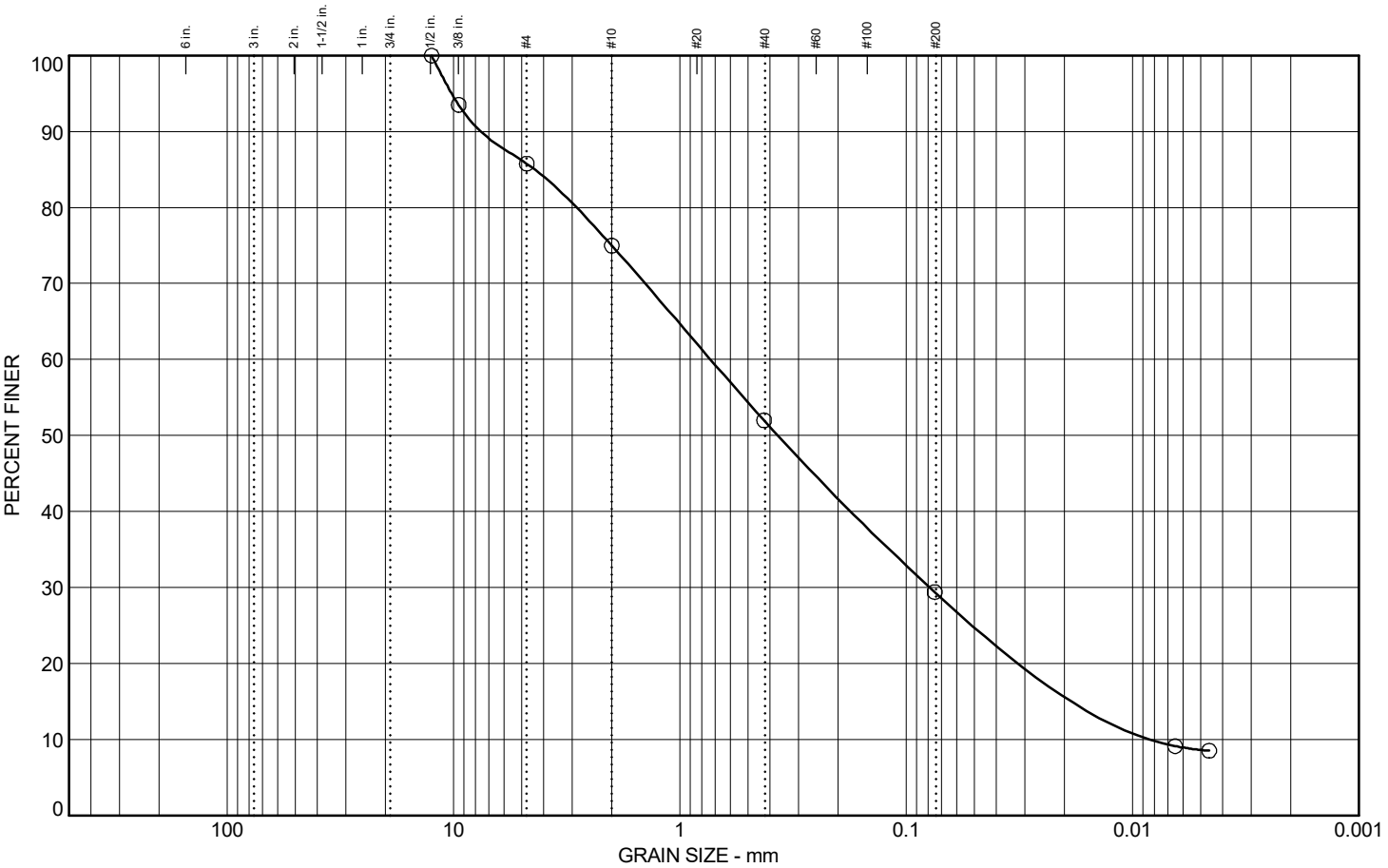
Sample No.: S-5 **Source of Sample:** SB-03 **Date:** 5/4/2020
Location: - **Depth / Elev:** 11' / 1017'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:55 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	14.2	10.8	23.0	22.6	20.8	8.6

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
12.5	100.0		
9.5	93.5		
4.75	85.8		
2	75.0		
0.425	52.0		
0.075	29.4		

* (no specification provided)

Soil Description

fine to medium sand, non-plastic silt

General Characteristics

Moisture Content = 7.3%

Atterberg Limits

LL= PL= PI= Non-plastic

Coefficients

D_{85}= 4.468 D_{60}= 0.729 D_{50}= 0.365
D_{30}= 0.079 D_{15}= 0.013 D_{10}= 0.007
C_u= 100.60 C_c= 1.17

Classification

USCS = SM AASHTO = A-2-4

Remarks

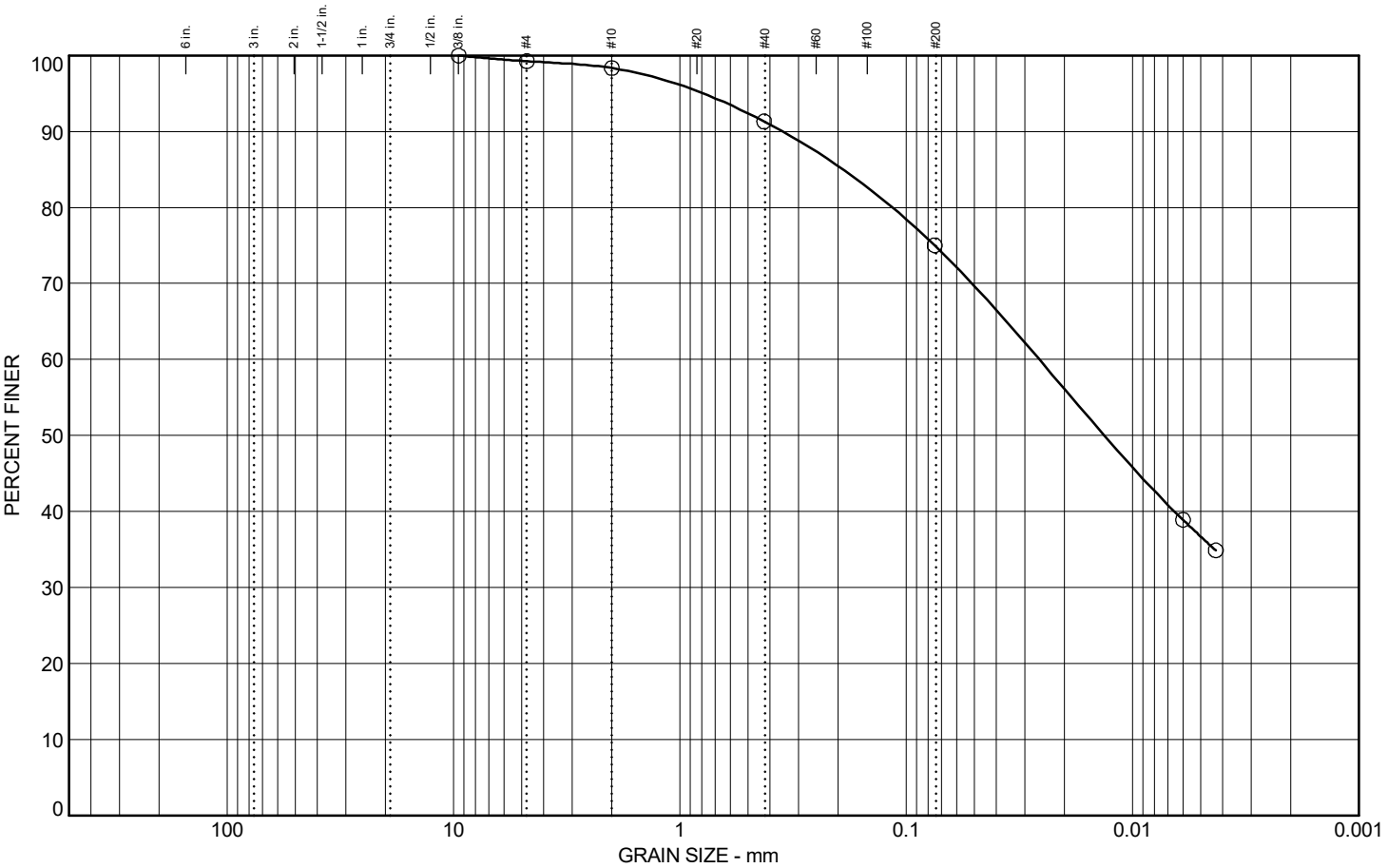
Group Index = 0

Sample No.: S-1 **Source of Sample:** SB-04 **Date:** 5/4/2020
Location: - **Depth / Elev:** 1' / 1060'

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:55 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.7	0.9	7.0	16.3	38.3	36.7

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
9.5	100.0		
4.75	99.3		
2	98.4		
0.425	91.3		
0.075	75.0		

* (no specification provided)

Soil Description

moderate plasticity clay, fine sand

General Characteristics

Moisture Content = 20.8%

Atterberg Limits

LL= 41 PL= 15 PI= 26

Coefficients

D_{85}= 0.217 D_{60}= 0.026 D_{50}= 0.013
D_{30}= D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL AASHTO = A-7-6

Remarks

Group Index = 18

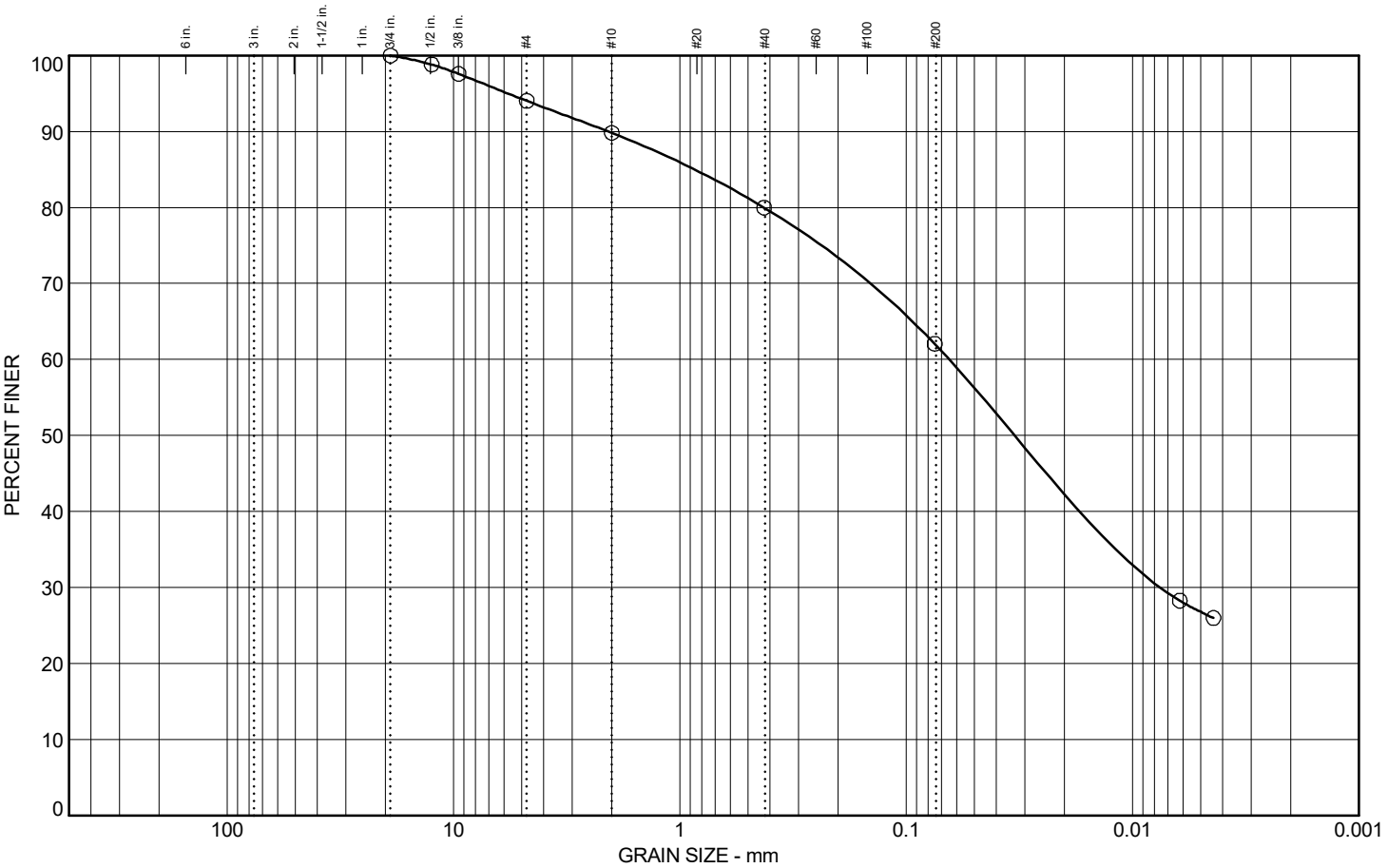
Sample No.: S-1 **Source of Sample:** SB-04A **Date:** 5/4/2020
Location: - **Depth / Elev:** 1' / 1078'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:55 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	6.0	4.2	9.8	17.9	35.2	26.8

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
19	100.0		
12.5	98.8		
9.5	97.6		
4.75	94.0		
2	89.8		
0.425	80.0		
0.075	62.1		

* (no specification provided)

Soil Description

low plasticity clay, fine to medium sand

General Characteristics

Moisture Content = 25.2%

Atterberg Limits

LL= 29 PL= 14 PI= 15

Coefficients

D_{85}= 0.936 D_{60}= 0.064 D_{50}= 0.031
D_{30}= 0.007 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL AASHTO = A-6

Remarks

Group Index = 6

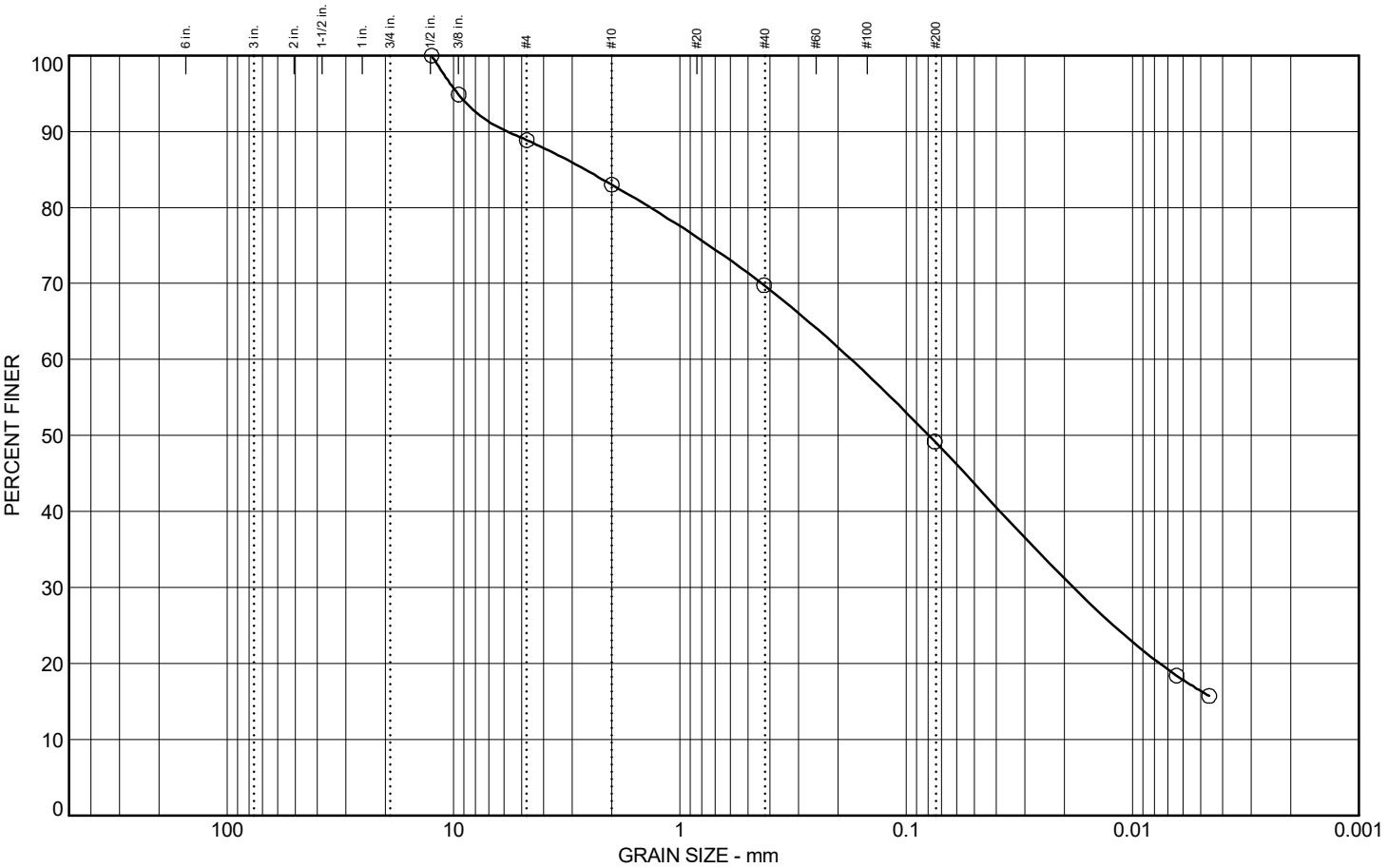
Sample No.: S-3 **Source of Sample:** SB-07 **Date:** 5/4/2020
Location: - **Depth / Elev:** 6' / 1068'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:55 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	11.1	5.9	13.2	20.6	32.8	16.4

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
12.5	100.0		
9.5	94.9		
4.75	88.9		
2	83.0		
0.425	69.8		
0.075	49.2		

* (no specification provided)

Soil Description

fine to medium sand, low plasticity clay

General Characteristics

Moisture Content = 10.8%

Atterberg Limits

LL= 20 PL= 13 PI= 7

Coefficients

D_{85}= 2.688 D_{60}= 0.187 D_{50}= 0.08
D_{30}= 0.016 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = SC-SM AASHTO = A-4

Remarks

Group Index = 0

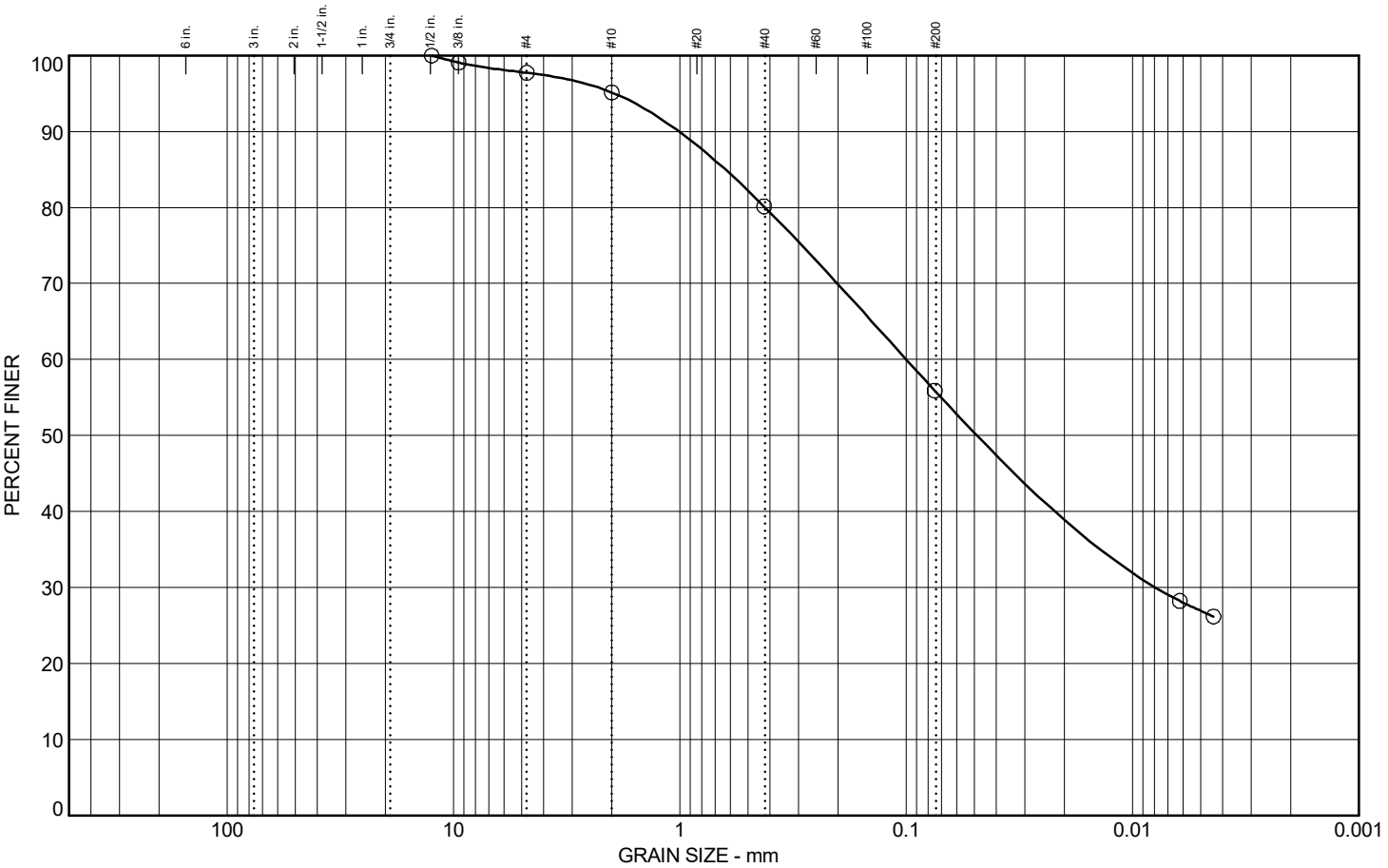
Sample No.: S-2 **Source of Sample:** SB-07A **Date:** 5/4/2020
Location: - **Depth / Elev:** 3.5' / 1067.5'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:55 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	2.3	2.6	15.0	24.3	29.0	26.9

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
12.5	100.0		
9.5	99.1		
4.75	97.7		
2	95.1		
0.425	80.2		
0.075	55.9		

* (no specification provided)

Soil Description

moderate plasticity clay, fine to medium sand

General Characteristics

Moisture Content = 29.1%

Atterberg Limits

LL= 35 PL= 14 PI= 21

Coefficients

D_{85}= 0.701 D_{60}= 0.101 D_{50}= 0.044
D_{30}= 0.007 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL AASHTO = A-6

Remarks

Group Index = 8

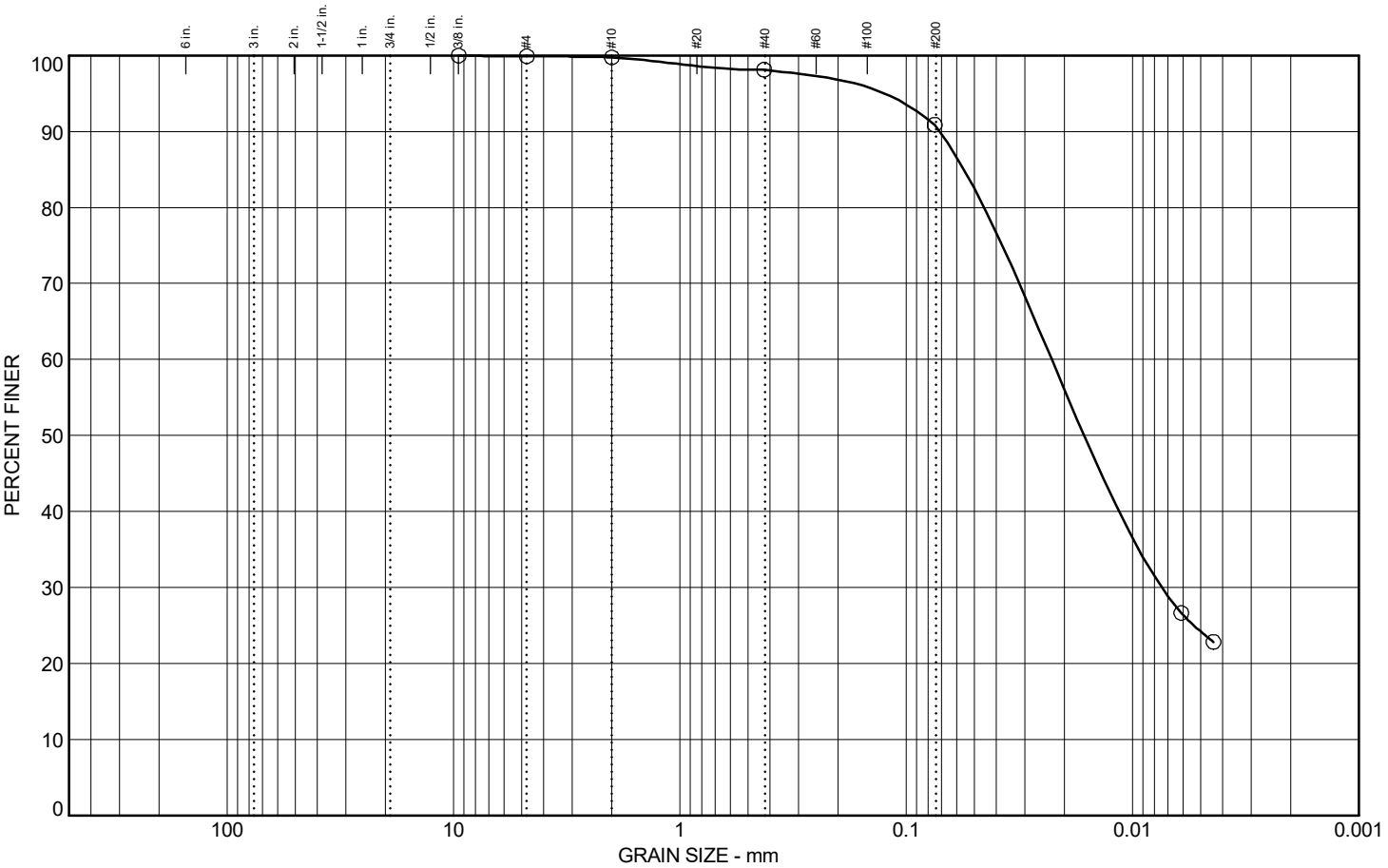
Sample No.: S-3 **Source of Sample:** SB-12 **Date:** 5/4/2020
Location: - **Depth / Elev:** 6' / 1083'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:55 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	0.1	0.1	1.6	7.2	66.6	24.3

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
9.5	100.0		
4.75	99.9		
2	99.8		
0.425	98.1		
0.075	90.9		

* (no specification provided)

Soil Description

low plasticity clay

General Characteristics

Moisture Content = 15.7%

Atterberg Limits

LL= 21 PL= 14 PI= 7

Coefficients

D_{85}= 0.06 D_{60}= 0.022 D_{50}= 0.015
D_{30}= 0.007 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL-ML AASHTO = A-4

Remarks

Group Index = 4

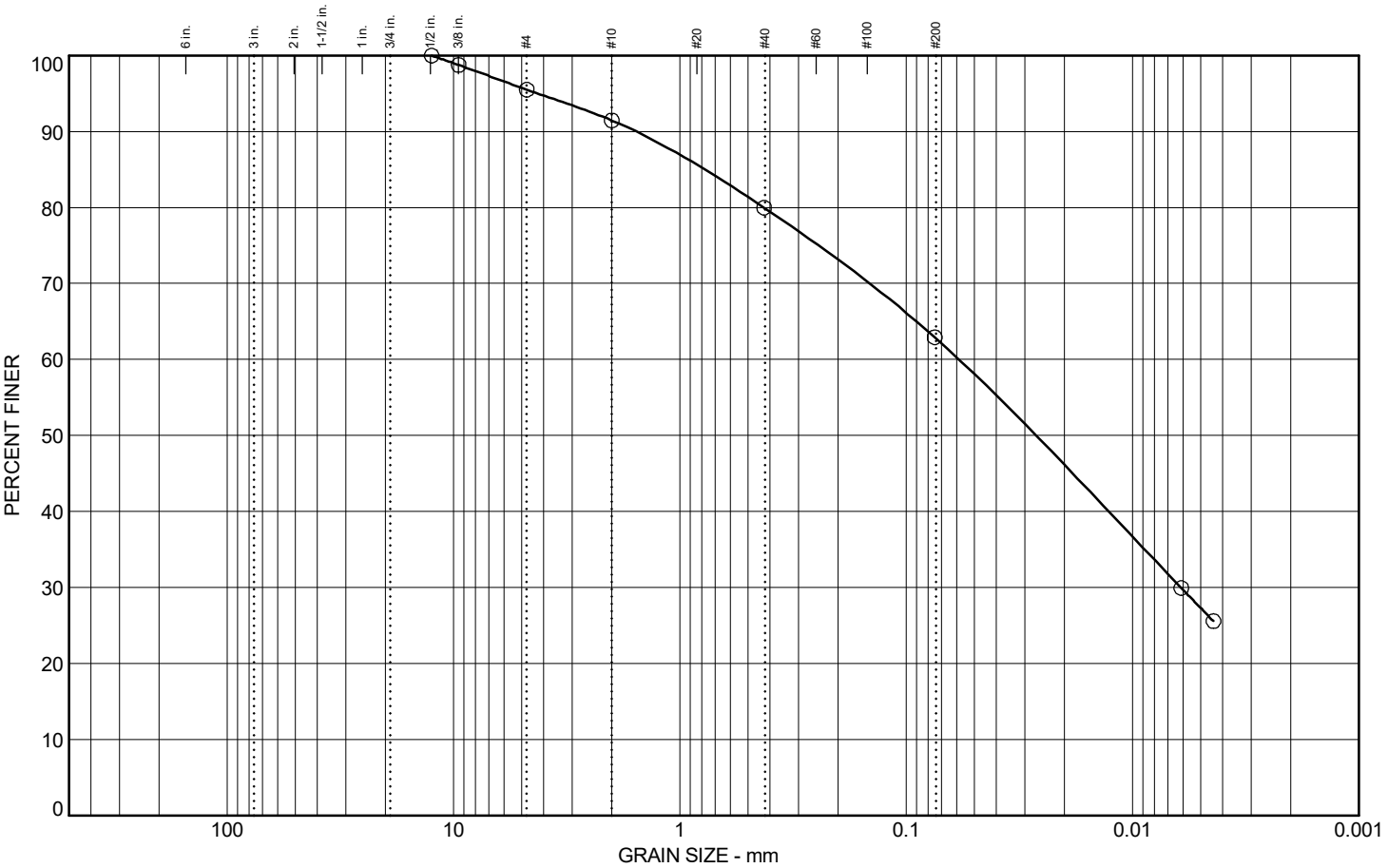
Sample No.: S-4 **Source of Sample:** SB-15 **Date:** 5/4/2020
Location: - **Depth / Elev:** 8.5' / 1069.5'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:56 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	4.5	4.0	11.5	17.0	35.7	27.3

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
12.5	100.0		
9.5	98.8		
4.75	95.5		
2	91.5		
0.425	80.0		
0.075	62.9		

* (no specification provided)

Soil Description

low plasticity clay, fine to medium sand

General Characteristics

Moisture Content = 11.4%

Atterberg Limits

LL= 23 PL= 15 PI= 8

Coefficients

D_{85}= 0.837 D_{60}= 0.06 D_{50}= 0.028
D_{30}= 0.006 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL AASHTO = A-4

Remarks

Group Index = 2

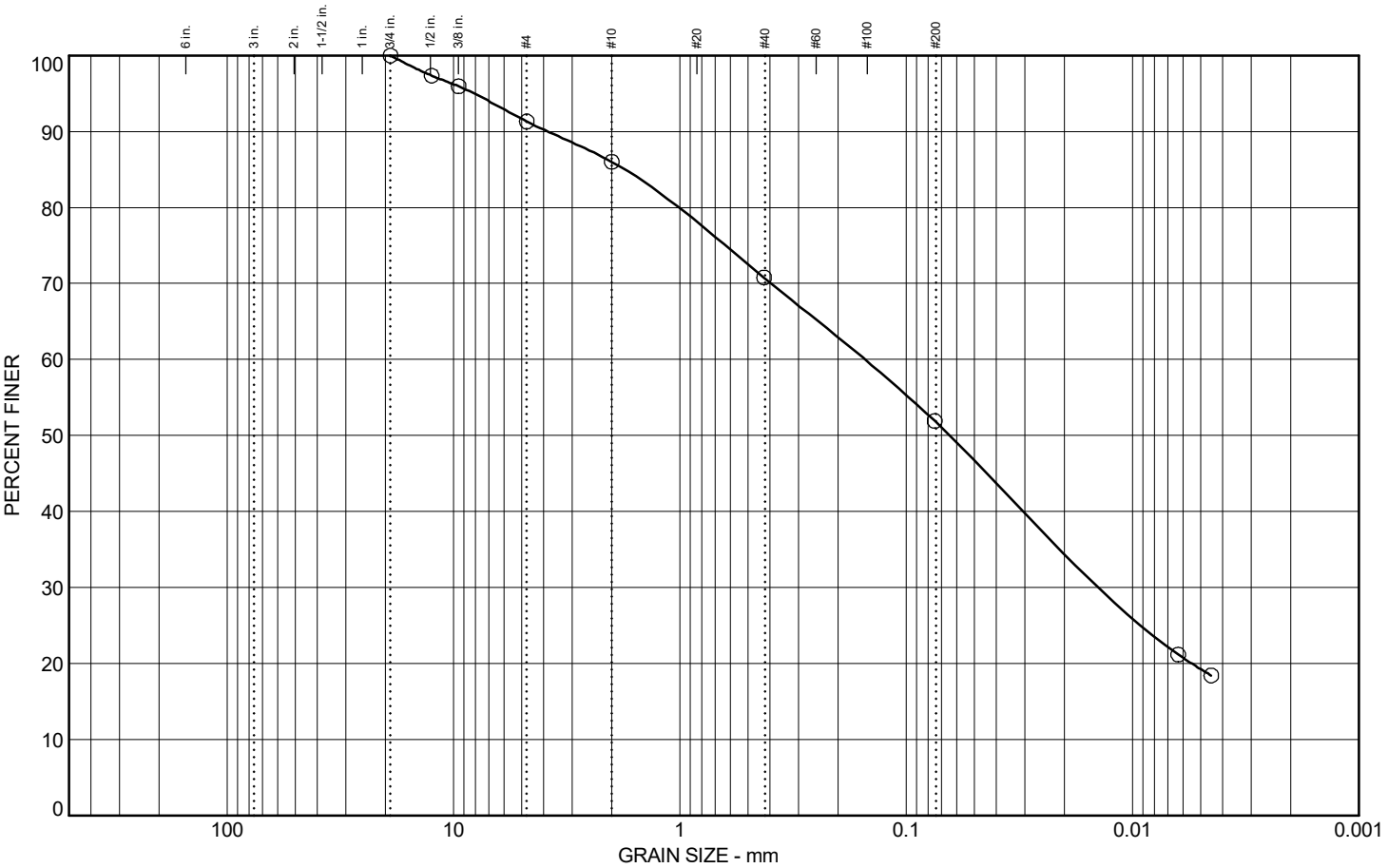
Sample No.: S-4 **Source of Sample:** SB-16 **Date:** 5/4/2020
Location: - **Depth / Elev:** 8.5' / 1062.5'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:56 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

PARTICLE SIZE DISTRIBUTION TEST REPORT



% COBBLES	% GRAVEL		% SAND			% FINES	
	CRS.	FINE	CRS.	MEDIUM	FINE	SILT	CLAY
0.0	0.0	8.7	5.3	15.2	18.9	32.6	19.3

SIEVE SIZE (mm)	PERCENT FINER	SPEC.* PERCENT	PASS? (X=NO)
19	100.0		
12.5	97.4		
9.5	96.0		
4.75	91.3		
2	86.0		
0.425	70.8		
0.075	51.9		

* (no specification provided)

Soil Description

low plasticity clay, fine to medium sand

General Characteristics

Moisture Content = 10.2%

Atterberg Limits

LL= 19 PL= 13 PI= 6

Coefficients

D_{85}= 1.804 D_{60}= 0.158 D_{50}= 0.064
D_{30}= 0.013 D_{15}= D_{10}=
C_u= C_c=

Classification

USCS = CL-ML AASHTO = A-4

Remarks

Group Index = 0

Sample No.: S-3 **Source of Sample:** SB-16A **Date:** 5/4/2020
Location: - **Depth / Elev:** 6' / 1064'

DLZ

Client: Burgess & Niple
Project: SEPD Waterline
Project No: 2021-3006.00 **Figure**

GRAIN SIZE II - DLZ MOD - DLZ TEMPLATE VER 2-2.GDT - 5/27/20 15:56 - X:\SHARED\DISCIPLINE\GEOTECH\GINT_COLUMBUS\PROJECTS\2021-3006.00 SEPD WATERLINE.GPJ

DLZ

SUBJECT: **pH of Soils** PROCEDURE: **ASTM D4972**

CLIENT: Burgess and Niple

PROJECT NAME: SEPD Waterline PROJECT NO.: 2021-3006.00 SHEET: 1 OF: 1

COMP. BY: PB DATE: 5/6/20

TEST PERFORMED USING: pH PAPER ☐ pH METER ☒

REV. BY: SR DATE: 5/7/20

Boring Number	Sample Number	Depth	pH in Water (nearest 0.1)	pH in Calcium Chloride (nearest 0.1)
SB-01 Bulk	S-1	0.0'-5.0'	8	7.7
SB-04 Bulk	S-1	0.0'-5.0'	8.8	7.8
SB-06 Bulk	S-1	0.0'-5.0'	8.5	8
SB-09 Bulk	S-1	0.0'-5.0'	8.9	8.2
SB-11 Bulk	S-1	0.0'-5.0'	8.5	7.9
SB-13 Bulk	S-1	0.0'-5.0'	8.7	8.2
SB-15 Bulk	S-1	0.0'-5.0'	8.5	8.2
SB-16A Bulk	S-1	0.0'-5.0'	8.7	8.2

Notes

pH Meter Calibrated with buffer solutions prior to all testing.

6121 Huntley Road
Columbus, Ohio 43229-1003
(614) 888-0040

Soil Resistivity Test Report

Project Name:	**SEPD Waterline**	Date:	**5/6/2020**
DLZ Job Number:	**2021-3006.00**	Comp. By	**PB**
Client:	**Burgess and Niple**	Rev. By	**SR**

Boring No. SB-01 Bulk Sample No. S-1 Depth 0.0'-5.0'

Mass of Resistivity Box full of Soil	**0.602**	lbs
Mass of Resistivity Box Empty	**0.280**	lbs
Mass of Soil to Fill Resistivity Box	**0.3215679**	lbs
Volume of Resistivity Box	**0.002643**	ft^3
Wet Density of Soil @ Test	**121.7**	lbs/ft^3
Moisture Content @ Test	**24.7**	%
Dry Density of Soil @ Test	**97.5**	lbs/ft^3
Ohms of Resistatance @ given Conditions	**3,140**	Ohms-cm

Boring No. SB-04 Bulk Sample No. S-1 Depth 0.0'-5.0'

Mass of Resistivity Box full of Soil	**0.636**	lbs
Mass of Resistivity Box Empty	**0.280**	lbs
Mass of Soil to Fill Resistivity Box	**0.355872**	lbs
Volume of Resistivity Box	**0.002643**	ft^3
Wet Density of Soil @ Test	**134.6**	lbs/ft^3
Moisture Content @ Test	**17.1**	%
Dry Density of Soil @ Test	**115.0**	lbs/ft^3
Ohms of Resistatance @ given Conditions	**6,260**	Ohms-cm

Note: Testing performed near liquid limit.

DLZ

Soil Resistivity Test Report

Project Name:	**SEPD Waterline**	Date:	**5/6/2020**
DLZ Job Number:	**2021-3006.00**	Comp. By	**PB**
Client:	**Burgess and Niple**	Rev. By	**SR**

Boring No. SB-06 Bulk Sample No. S-1 Depth 0.0'-5.0'

Mass of Resistivity Box full of Soil	**0.612**	lbs
Mass of Resistivity Box Empty	**0.280**	lbs
Mass of Soil to Fill Resistivity Box	**0.3312904**	lbs
Volume of Resistivity Box	**0.002643**	ft^3
Wet Density of Soil @ Test	**125.3**	lbs/ft^3
Moisture Content @ Test	**22.3**	%
Dry Density of Soil @ Test	**102.5**	lbs/ft^3
Ohms of Resistatance @ given Conditions	**2,860**	Ohms-cm

Boring No. SB-09 Bulk Sample No. S-1 Depth 0.0'-5.0'

Mass of Resistivity Box full of Soil	**0.635**	lbs
Mass of Resistivity Box Empty	**0.280**	lbs
Mass of Soil to Fill Resistivity Box	**0.354417**	lbs
Volume of Resistivity Box	**0.002643**	ft^3
Wet Density of Soil @ Test	**134.1**	lbs/ft^3
Moisture Content @ Test	**11.7**	%
Dry Density of Soil @ Test	**120.1**	lbs/ft^3
Ohms of Resistatance @ given Conditions	**6,660**	Ohms-cm

Note: Testing performed near liquid limit.

DLZ

Soil Resistivity Test Report

Project Name:	**SEPD Waterline**	Date:	**5/6/2020**
DLZ Job Number:	**2021-3006.00**	Comp. By	**PB**
Client:	**Burgess and Niple**	Rev. By	**SR**

Boring No. SB-11 Bulk Sample No. S-1 Depth 0.0'-5.0'

Mass of Resistivity Box full of Soil	**0.606**	lbs
Mass of Resistivity Box Empty	**0.280**	lbs
Mass of Soil to Fill Resistivity Box	**0.3254481**	lbs
Volume of Resistivity Box	**0.002643**	ft^3
Wet Density of Soil @ Test	**123.1**	lbs/ft^3
Moisture Content @ Test	**24.8**	%
Dry Density of Soil @ Test	**98.7**	lbs/ft^3
Ohms of Resistatance @ given Conditions	**3,310**	Ohms-cm

Boring No. SB-13 Bulk Sample No. S-1 Depth 0.0'-5.0'

Mass of Resistivity Box full of Soil	**0.637**	lbs
Mass of Resistivity Box Empty	**0.280**	lbs
Mass of Soil to Fill Resistivity Box	**0.3562689**	lbs
Volume of Resistivity Box	**0.002643**	ft^3
Wet Density of Soil @ Test	**134.8**	lbs/ft^3
Moisture Content @ Test	**16.6**	%
Dry Density of Soil @ Test	**115.6**	lbs/ft^3
Ohms of Resistatance @ given Conditions	**4,620**	Ohms-cm

Note: Testing performed near liquid limit.

DLZ

Soil Resistivity Test Report

Project Name:	**SEPD Waterline**	Date:	**5/6/2020**
DLZ Job Number:	**2021-3006.00**	Comp. By	**PB**
Client:	**Burgess and Niple**	Rev. By	**SR**

Boring No. SB-15 Bulk Sample No. S-1 Depth 0.0'-5.0'

Mass of Resistivity Box full of Soil	**0.623**	lbs
Mass of Resistivity Box Empty	**0.280**	lbs
Mass of Soil to Fill Resistivity Box	**0.3422474**	lbs
Volume of Resistivity Box	**0.002643**	ft^3
Wet Density of Soil @ Test	**129.5**	lbs/ft^3
Moisture Content @ Test	**21.0**	%
Dry Density of Soil @ Test	**107.0**	lbs/ft^3
Ohms of Resistatance @ given Conditions	**4,160**	Ohms-cm

Boring No. SB-16A Bulk Sample No. S-1 Depth 0.0'-5.0'

Mass of Resistivity Box full of Soil	**0.628**	lbs
Mass of Resistivity Box Empty	**0.280**	lbs
Mass of Soil to Fill Resistivity Box	**0.3479133**	lbs
Volume of Resistivity Box	**0.002643**	ft^3
Wet Density of Soil @ Test	**131.6**	lbs/ft^3
Moisture Content @ Test	**17.9**	%
Dry Density of Soil @ Test	**111.6**	lbs/ft^3
Ohms of Resistatance @ given Conditions	**5,070**	Ohms-cm

Note: Testing performed near liquid limit.

DLZ

DLZ

Sulfate Content Report

PROJECT NAME: SEPD Waterline | PROJECT NO.: 2021-3006.00 | SHEET 1 OF 1

CLIENT: Burgess & Niple | PROCEDURE: Supplement 1122 | COMP. BY: PB | DATE: 5/6/2020

Boring No.	Sample No.	Depth	Initial Can No.	Can No. / Weight	Can No. / Weight	Bottle No.	Beaker No.	Readings w/Dilution of 1/20			Average (ppm)	Actual (ppm) (Avg x 20)
								1	2	3		
SB-01Bulk	S-1	0.0'-0.5'		20 / 20g	23 / 20g	1	1003	12	12	12	12	240
SB-04Bulk	S-2	0.0'-0.5'		156 / 20g	163 / 20g	2	1004	2	2	2	2	<100
SB-06Bulk	S-3	0.0'-0.5'		158 / 20g	170 / 20g	4	1005	5	5	6	5	110
SB-09Bulk	S-4	0.0'-0.5'		32 / 20g	85 / 20g	5	1007	5	5	5	5	100
SB-11Bulk	S-5	0.0'-0.5'		99 / 20g	110 / 20g	6	1009	10	9	10	10	190
SB-13Bulk	S-6	0.0'-0.5'		59 / 20g	96 / 20g	7	1010	8	8	8	8	160
SB-15Bulk	S-7	0.0'-0.5'		124 / 20g	129 / 20g	8	1013	0	0	0	0	<100
SB-16ABulk	S-8	0.0'-0.5'		125 / 20g	146 / 20g	9	1019	10	10	10	10	200

Remarks

6121 Huntley Road
Columbus, Ohio 43229-1003
(614) 888-0040

DLZ-081
Created 03/13/2013
Rev.01 09/26/2013

ADVANCED ANALYTICS LABORATORIES, INC.
1025 CONCORD AVENUE
COLUMBUS, OHIO 43212
(614) 299-9922 FAX (614) 299-4002
Analysis & Testing - Quality Control Programs - Research & Development

DLZ Ohio, Inc.
6121 Huntley Rd.
Columbus, OH 43229

Date Reported: 5/13/20

Project: 2021-3006.00
P.O. Number: 2021-3006.00
Project Manager: Emma Anhofer

ANALYTICAL RESULTS

Client Sample I.D.: SB-04
AALI Sample I.D.: 2004065-01 (Soil)

Date Collected: 4/9/20
Date Received: 4/30/20

Analyte	Result	Units	Reporting Limit	Prepared	Analyzed	Method	Analyst	Notes
Conventional Chemistry Parameters by Standard/EPA Methods								
Chloride	**14.2**	mg/kg	3.00	5/5/20	5/5/20	AASHTO T291	RG	
Sulfide	**200**	mg/kg	10.0	5/12/20	5/13/20	EPA 9030	SUB	I-03

Advanced Analytics Laboratories, Inc.

L. Eve Karnitis, President

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6121 Huntley Rd.
Columbus, OH 43229

Date Reported: 5/13/20

Project: 2021-3006.00
P.O. Number: 2021-3006.00
Project Manager: Emma Anhofer

ANALYTICAL RESULTS

Client Sample I.D.: SB-06
AALI Sample I.D.: 2004065-02 (Soil)

Date Collected: 4/9/20
Date Received: 4/30/20

Analyte	Result	Units	Reporting Limit	Prepared	Analyzed	Method	Analyst	Notes
Conventional Chemistry Parameters by Standard/EPA Methods								
Chloride	**24.8**	mg/kg	3.00	5/5/20	5/5/20	AASHTO T291	RG	
Sulfide	**240**	mg/kg	10.0	5/12/20	5/13/20	EPA 9030	SUB	I-03

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DLZ Ohio, Inc.
6121 Huntley Rd.
Columbus, OH 43229

Date Reported: 5/13/20

Project: 2021-3006.00
P.O. Number: 2021-3006.00
Project Manager: Emma Anhofer

ANALYTICAL RESULTS

Client Sample I.D.: SB-09
AALI Sample I.D.: 2004065-03 (Soil)

Date Collected: 4/9/20
Date Received: 4/30/20

Analyte	Result	Units	Reporting Limit	Prepared	Analyzed	Method	Analyst	Notes
Conventional Chemistry Parameters by Standard/EPA Methods								
Chloride	**10.6**	mg/kg	3.00	5/5/20	5/5/20	AASHTO T291	RG	
Sulfide	**120**	mg/kg	10.0	5/12/20	5/13/20	EPA 9030	SUB	I-03

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DLZ Ohio, Inc.
6121 Huntley Rd.
Columbus, OH 43229

Date Reported: 5/13/20

Project: 2021-3006.00
P.O. Number: 2021-3006.00
Project Manager: Emma Anhofer

ANALYTICAL RESULTS

Client Sample I.D.: SB-11
AALI Sample I.D.: 2004065-04 (Soil)

Date Collected: 4/9/20
Date Received: 4/30/20

Analyte	Result	Units	Reporting Limit	Prepared	Analyzed	Method	Analyst	Notes
Conventional Chemistry Parameters by Standard/EPA Methods								
Chloride	ND	mg/kg	3.00	5/5/20	5/5/20	AASHTO T291	RG	
Sulfide	**200**	mg/kg	10.0	5/12/20	5/13/20	EPA 9030	SUB	I-03

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6121 Huntley Rd.
Columbus, OH 43229

Date Reported: 5/13/20

Project: 2021-3006.00
P.O. Number: 2021-3006.00
Project Manager: Emma Anhofer

ANALYTICAL RESULTS

Client Sample I.D.: SB-13
AALI Sample I.D.: 2004065-05 (Soil)

Date Collected: 4/9/20
Date Received: 4/30/20

Analyte	Result	Units	Reporting Limit	Prepared	Analyzed	Method	Analyst	Notes
Conventional Chemistry Parameters by Standard/EPA Methods								
Chloride	**3.54**	mg/kg	3.00	5/5/20	5/5/20	AASHTO T291	RG	
Sulfide	**160**	mg/kg	10.0	5/12/20	5/13/20	EPA 9030	SUB	I-03

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6121 Huntley Rd.
Columbus, OH 43229

Date Reported: 5/13/20

Project: 2021-3006.00
P.O. Number: 2021-3006.00
Project Manager: Emma Anhofer

ANALYTICAL RESULTS

Client Sample I.D.: SB-15
AALI Sample I.D.: 2004065-06 (Soil)

Date Collected: 4/9/20
Date Received: 4/30/20

Analyte	Result	Units	Reporting Limit	Prepared	Analyzed	Method	Analyst	Notes
Conventional Chemistry Parameters by Standard/EPA Methods								
Chloride	ND	mg/kg	3.00	5/5/20	5/5/20	AASHTO T291	RG	
Sulfide	**240**	mg/kg	10.0	5/12/20	5/13/20	EPA 9030	SUB	I-03

Advanced Analytics Laboratories, Inc.

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DLZ Ohio, Inc.
6121 Huntley Rd.
Columbus, OH 43229

Date Reported: 5/13/20

Project: 2021-3006.00
P.O. Number: 2021-3006.00
Project Manager: Emma Anhofer

ANALYTICAL RESULTS

Client Sample I.D.: SB-16A
AALI Sample I.D.: 2004065-07 (Soil)

Date Collected: 4/9/20
Date Received: 4/30/20

Analyte	Result	Units	Reporting Limit	Prepared	Analyzed	Method	Analyst	Notes
Conventional Chemistry Parameters by Standard/EPA Methods								
Chloride	**5.31**	mg/kg	3.00	5/5/20	5/5/20	AASHTO T291	RG	
Sulfide	**200**	mg/kg	10.0	5/12/20	5/13/20	EPA 9030	SUB	I-03

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Columbus, OH 43229

Date Reported: 5/13/20

Project: 2021-3006.00
P.O. Number: 2021-3006.00
Project Manager: Emma Anhofer

ANALYTICAL RESULTS

Client Sample I.D.: SB-01
AALI Sample I.D.: 2004065-08 (Soil)

Date Collected: 4/9/20
Date Received: 4/30/20

Analyte	Result	Units	Reporting Limit	Prepared	Analyzed	Method	Analyst	Notes
Conventional Chemistry Parameters by Standard/EPA Methods								
Chloride	ND	mg/kg	3.00	5/5/20	5/5/20	AASHTO T291	RG	
Sulfide	**320**	mg/kg	10.0	5/12/20	5/13/20	EPA 9030	SUB	I-03

Notes and Definitions

I-03 Analyzed outside of the US EPA holding time at the request of the client.

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

Advanced Analytics Laboratories, Inc.

L. Eve Karnitis, President

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Ohio Environmental Protection Agency

Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

October 19, 2020

RE: Springfield City Public Water System
Plan
Approval
Classification: Detail Plans
Drinking Water Program
Clark County
PWSID: OH1204412
Package Number: 1355518

City of Springfield
2100 Lagonda Avenue
Springfield, Ohio 45503-7515

Subject: Application No. 1355518-WS; Detail Plans for Eastern Pressure District Waterline Upgrades; Plans Received from Burgess & Niple, Ltd. - Columbus

Ladies and Gentlemen:

The Ohio Environmental Protection Agency has reviewed the enclosed plans submitted pursuant to Ohio Revised Code Sections 6109.07 et. seq., or accepted the certification of plan review by an authorized professional engineer pursuant to a contract therefore. These plans are approved subject to the condition of compliance with all applicable laws, rules, regulations, and standards. The applicant is responsible for obtaining all other necessary approvals, waivers or releases required by state, federal or local law prior to implementing this plan. Further, all construction must be supervised by a registered engineer, if required by law, or expert qualified in such work.

The enclosed report or project summary sheet(s) contains a description of the facilities approved which may include information regarding approved operating rates, capacities, and requirements, and is incorporated herein.

This approval shall become void five years from the date of this letter unless the facilities are constructed as proposed by that date. By accepting this approval, the applicant acknowledges that this deadline shall not be considered or construed as extending or having any effect whatsoever on any compliance schedule or deadline set forth in any administrative or court order issued to or binding upon the applicant, and the applicant shall abide by such compliance schedules or deadlines to avoid the initiation of additional legal action by the Ohio Environmental Protection Agency.

This approval covers only the water supply facilities proposed. Sanitary waste handling facilities may need a separate approval by the Ohio Environmental Protection Agency. Other aspects of the project may need approval by the Ohio Department of Health and/or the local health department.

Lead solder and flux that exceeds 0.2 percent lead content and any pipe or pipe fitting that exceeds a 0.25 percent lead content shall not be used in the installation of the proposed facilities.

The owner shall provide for the proper maintenance and operation of the water supply and distribution system.

Necessary measures shall be taken to ensure that there will be no cross connections between the public water supply and any private water supply. The local health department shall be notified of any private water wells which will no longer be used as sources of potable water and which should be abandoned.

The supplier of water shall ensure that no person shall install or maintain a water service connection where a booster pump has been installed, unless an approved method is in place and operational to maintain a minimum suction pressure in accordance with Ohio Administrative Code Rule 3745-95-07.

The owner shall contact the appropriate district of the U.S. Army Corps of Engineers regarding each stream or wetland crossing proposed as part of this project. If a 404 permit is determined to be necessary by the Corps of Engineers, the owner shall acquire a Section 404 Permit and 401 Water Quality Certification, before impacting

Any well, well point, pit, or other device installed for the purpose of lowering the ground water level to facilitate construction of this project shall be properly abandoned in accordance with the provisions of Rule 3745-9-10 of the Ohio Administrative Code or in accordance with the provisions of this plan or as directed by the director of the Ohio Environmental Protection Agency or his representative. In addition, a well sealing report shall be filed with the Ohio Department of Natural Resources, Division of Water, within 30 days of completion, in accordance with Section 1521.01 of the Ohio Revised Code.

Any person installing any well, well point, pit, or other device used for the purpose of removing ground water from an aquifer shall complete and file a Well Log and Drilling Report form with the Ohio Department of Natural Resources, Division of Water, within 30 days of the well completion in accordance with the Ohio Revised Code, Section 1521.01 and 1521.05. In addition, any such facility that has a capacity to withdraw waters of the state in an amount greater than 100,000 gallons per day from all sources shall be registered by the owner with the Chief of the Division of Water, Ohio Department of Natural Resources, within three months after the facility is completed in accordance with Section 1521.16 of the Ohio Revised Code. For copies of the necessary well log, drilling report, or registration forms, please contact:

Division of Water
Ohio Department of Natural Resources
Fountain Square
Columbus, OH 43224-1387
(614) 265-6717

Air Pollution Control Requirements: Fugitive dust generated by this water line project shall be controlled as specified in OAC 3745-17-08(B).

A National Pollutant Discharge Elimination System (NPDES) permit will be required if the construction project results in a disturbance greater than or equal to one acre. As a requirement of the permit, a Storm Water Pollution Prevention Plan (SWPPP) must be developed before submitting the Notice of Intent (NOI) for coverage under the permit. The NOI must be submitted 45 days prior to beginning construction. To obtain the application form and relevant information, please contact Ohio EPA's stormwater coordinator at (937) 285-6357.

The proposed facility may be constructed only in accordance with plans approved by the director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the agency. Any deviation from the approved plans or the above conditions may lead to sanctions and penalties provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

If a Water Supply Revolving Loan Account (WSRLA) loan is desired, it will be necessary to comply with the requirements of Ohio Revised Code 6109.22. If compliance with WSRLA requirements necessitates any revisions to the plans as herein approved, a resubmittal and approval of the plans will be required before construction.

Should there be any questions regarding the requirements, meaning, or interpretation of any of the above which we may clarify, please contact the Division of Drinking and Ground Waters, Southwest District Office, Ohio Environmental Protection Agency.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00, made payable to "Treasurer of the State of Ohio", which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
30 East Broad Street, 4th Floor
Columbus, OH 43215

Ohio EPA has developed a customer service survey to get feedback from regulated entities that have contacted us for regulatory assistance, or worked with the Agency to obtain a permit, license or other authorization. Ohio EPA's goal is to provide our customers with the best possible customer service, and your feedback is important to us in meeting this goal. Please take a few minutes to complete this survey and share your experience with us at www.epa.ohio.gov/survey.aspx.

Sincerely,

Laurie A. Stevenson

Laurie A. Stevenson
Director

ec: Clark County Health Department
Dan Osika, SWDO-DDAGW
Vui Chung, P.E., Burgess & Niple, Inc.

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Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

Oct 27, 2020

City of Springfield
Tim Weaver
2100 Lagonda Ave
Springfield, OH 45503

Re: Approval Under Ohio EPA National Pollutant Discharge Elimination System (NPDES) - Construction Site Stormwater General Permit - OHC000005

Dear Applicant,

Your NPDES Notice of Intent (NOI) application is approved for the following facility/site. Please use your Ohio EPA Facility Permit Number in all future correspondence.

Facility Name:	Ogden Road Pump Station and Water Main
Facility Location:	105 Ogden Road
City:	Springfield
County:	Clark
Township:	
Ohio EPA Facility Permit Number:	1GC07867*AG
Permit Effective Date:	Oct 27, 2020

Please read and review the permit carefully. The permit contains requirements and prohibitions with which you must comply. Coverage under this permit will remain in effect until a renewal of the permit is issued by the Ohio EPA.

If more than one operator (defined in the permit) will be engaged at the site, each operator shall seek coverage under the general permit. Additional operator(s) shall submit a Co-Permittee NOI to be covered under this permit. There is no fee associated with the Co-Permittee NOI form.

Please be aware that this letter only authorizes discharges in accordance with the above referenced NPDES CGP. The placement to fill into regulated waters of the state may require a 401 Water Quality Certification and/or Isolated Wetlands Permit from Ohio EPA. Also, a Permit-To-Install (PTI) is required for the construction of sanitary or industrial wastewater collection, conveyance, storage, treatment, or disposal facility; unless a specific exemption by rule exists. Failure to obtain the required permits in advance is a violation of Ohio Revised Code 6111 and potentially subjects you to enforcement and civil penalties.

To view your electronic submissions and permits please Logon in to the Ohio EPA's eBusiness Center at http://ebiz.epa.ohio.gov.

If you need assistance or have questions please call (614) 644-2001 and ask for Construction Site Stormwater General Permit support or visit our website at http://www.epa.ohio.gov.

Sincerely,

Laurie A. Stevenson
Director

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Prevailing Wage Determination Cover Letter

County: CLARK
Determination Date: 11/17/2020
Expiration Date: 02/17/2021

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

CERTIFIED PAYROLL REPORT

Employer Name & Address	Name of General / Prime Contractor	Project Name & Location	Contracting Public Authority
Check if subcontractor ☐	Week Ending	Payroll # Page_____Of_____	Project Number

1. Employee Name, Address and Social Security Number	2. Work Class	3. Hours Worked - Day & Date	4. Project Total Hrs.	5. Base Rate	6. Project Gross	7. Fringes: Cash ☐ Approved Plans ☐ Cash & Approved Plans ☐					8. Total Hours All Jobs	9. Total Gross All Jobs	10. Taxes Withheld	11. Other Deducts	12. NET Paid
						H&W	Pens	Vac	App	Other					
		OT													
		ST													
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Date_____My signature on this form signifies that I pay, or supervise the payment of the employees shown above. I am certifying: 1) That during the pay period reported on this form, all hours worked on this project have been paid at the appropriate prevailing wage rate for the class of work done. 2) That the fringe benefits have been paid as indicated above. 3) That no rebates or deductions have been or will be made, directly or indirectly from the total wages earned, other than permissable deductions as defined in the Ohio Revised Code Chapter 4115. 4) That apprentices are registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training. The willful falsification of any of the above statements may subject the contractor or subcontractor to civil or criminal prosecution.

Name and Title _____ Signature _____

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

Certified Payroll Heading

Employer name and address: Company's full name and address. Indicate if the company is a subcontractor, if so list the name of the General or Prime. Project: Name and location of the project, including county. Contracting Public Authority: Name and address of the contracting public authority. Week Ending: Month, day, and year for last day of reporting period. Payroll # : Indicates 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 blank.

Information by Column

- 1. 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.
- 4. 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.
  - 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.
  - Total rate may be paid as listed in prevailing wage rate schedule with total fringe amounts paid approved plans.
  - 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.
- 8. Total Hours All Jobs: Total all hours worked during the pay period including non-prevailing wage jobs.
- 9. Total Gross All Jobs: Gross amount earned in the pay period for all hours worked.
- 10. Self explanatory.
- 11. Self explanatory.
- 12. Self explanatory.

CONTACT US

Division of Industrial Compliance & Labor
6606 Tussing Road
Reynoldsburg, OH 43068

Phone 614.644.2223
Fax 614.644.2618
Email IC@com.state.oh.us

Webmaster
Contact the Webmaster for Questions or Comments on the Website:
webmaster@com.state.oh.us

CONNECT WITH US

LOOKUP SERVICES

- Registered Contractor List
- Boiler Information Database
- Building Code Compliance Electronic Plan Submission
- Board Of Building Appeals Case Lookup
- Elevator Database Lookup

RESOURCES

- Federal Wage and Hour
- U.S. Consumer Product Safety Commission
- National Electric, Fire Alarm and Sprinkler Codes
- Minor Labor Law Poster
- 2017 Minimum Wage Poster
- 2018 Minimum Wage Poster

ABOUT INDUSTRIAL COMPLIANCE

Director Sheryl Maxfield
Superintendent Geoff Eaton

Ohio.gov

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Prevailing Wage Rate
Skilled Crafts

Name of Union: Asbestos Local 50 Zone 2

Change # : LCN02-2020fbLoc50

Craft : Asbestos Worker **Effective Date :** 07/09/2020 **Last Posted :** 07/09/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Asbestos Insulation Mechanic	$31.09		$7.45	$7.60	$0.44	$0.00	$2.50	$0.15	$0.00	$0.00	$49.23	$64.78
Firestop Technician	$31.09		$7.45	$7.60	$0.44	$0.00	$2.50	$0.15	$0.00	$0.00	$49.23	$64.78
Apprentice	**Percent**											
1st year	56.93	$17.70	$7.21	$0.00	$0.40	$0.00	$0.00	$0.15	$0.00	$0.00	$25.46	$34.31
2nd year	68.13	$21.18	$7.21	$0.95	$0.40	$0.00	$0.00	$0.15	$0.00	$0.00	$29.89	$40.48
3rd year	78.35	$24.36	$7.21	$1.90	$0.40	$0.00	$0.30	$0.15	$0.00	$0.00	$34.32	$46.50
4th year	89.55	$27.84	$7.21	$1.90	$0.40	$0.00	$0.30	$0.15	$0.00	$0.00	$37.80	$51.72

Special Calculation Note : Other is Industry Fund

Ratio :

4 Journeymen to 1 no apprentice may work on a job site without a Mechanic.

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE

Special Jurisdictional Note : In Butler County the following townships are included: (Lemon Twp, Madison Twp) In Warren County the following townships are included: (Clear Creek Twp, Franklin Twp, Massie Twp, Turtle Creek Twp, Wayne Twp)

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Asbestos Local 207 OH

Change # : LCN01-2018fbLoc207OH

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

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Boilermaker Local 105

Change # : LCN02-2013fbLoc 105

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

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Boilermaker	$35.26		$7.07	$13.28	$0.89	$0.00	$3.00	$0.55	$0.00	$0.00	$60.05	$77.68
Apprentice	**Percent**											
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

Ratio :

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 :

Prevailing Wage Determination Cover Letter

County: CLARK
Determination Date: 09/08/2020
Expiration Date: 12/08/2020

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

Note that the classification description is clarified after the local union number at the top of the page.
Apprentice and Apprentice Improver, Health and Welfare after 60 days. Mason Trainees Health and Welfare after 90 days.

Ratio :

Bricklayer Stone Mason Refractory Worker:
1-2 Journeymen to 1 Apprentice
3-4 Journeymen to 2 Apprentice
5-6 Journeymen to 2 Apprentice
7-10 Journeymen to 3 Apprentice

Mason Trainee Ratio:

1 Apprentice permits 1 Mason Trainee
2 Apprentice permits 1 Mason Trainee
3 Apprentice permits 2 Mason Trainee
4 Apprentice permits 2 Mason Trainee

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

Ratio of Improver Apprentices to Journeymen in no case shall their be no more than 1 Improver Apprentice to 6 Journeymen

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, HIGHLAND, LOGAN, MIAMI, MONTGOMERY, PREBLE*, SHELBY

Special Jurisdictional Note : In Preble County the following townships are included: Jackson, Monroe, Harrison, Twin, Jefferson and Washington

Details :

Apprentice Ratio's covers: Bricklayer, Stone Mason, Refractory worker and Pointer, Cleaner, Caulker.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 22 Tile Finisher

Change # : LCN01-2020fbLoc22

Craft : Bricklayer **Effective Date :** 07/01/2020 **Last Posted :** 06/25/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Tile Marble Terrazzo Finisher	$24.47		$3.00	$5.72	$0.44	$0.00	$0.00	$0.00	$0.00	$0.00	$33.63	$45.86
Base Machine	$24.97		$3.00	$5.72	$0.44	$0.00	$0.00	$0.00	$0.00	$0.00	$34.13	$46.61
Apprentice	**Percent**											
1st 6 months 0-600 hrs	60.00	$14.68	$3.00	$0.00	$0.44	$0.00	$0.00	$0.00	$0.00	$0.00	$18.12	$25.46
2nd 6 months 601-1200 hrs	65.00	$15.91	$3.00	$0.00	$0.44	$0.00	$0.00	$0.00	$0.00	$0.00	$19.35	$27.30
3rd 6 months 1201-1800 hrs	70.00	$17.13	$3.00	$5.72	$0.44	$0.00	$0.00	$0.00	$0.00	$0.00	$26.29	$34.85
4th 6 months 1801-2400	75.00	$18.35	$3.00	$5.72	$0.44	$0.00	$0.00	$0.00	$0.00	$0.00	$27.51	$36.69
5th 6 months 2401-3000 hrs	80.00	$19.58	$3.00	$5.72	$0.44	$0.00	$0.00	$0.00	$0.00	$0.00	$28.74	$38.52
6th 6 months 3001-3600 hrs	90.00	$22.02	$3.00	$5.72	$0.44	$0.00	$0.00	$0.00	$0.00	$0.00	$31.18	$42.19
TMT Helper-May enter Apprentice Program after 90 day completionr												
First 90	45.00	$11.01	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$11.01	$16.52

Days												

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.
Medical Savings Account: The Medical Savings Account can only be deducted providing employee shows proof voluntary enrollment in the program. Minimum contribution of $1.00 per hourworked with no maximum.

Ratio :

1 Journeyman 1 Apprentice
5 Journeyman 1 Apprentice
10 Journeyman 2 Apprentice
15Journeyman 3 Apprentice
20 Journeyman 4 Apprentice
25 Journeyman 5 Apprentice
8 Employees 1 Helper

Jurisdiction (* denotes special jurisdictional note) :

AUGLAIZE, CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, HARDIN, HIGHLAND, LOGAN, MERCER, MIAMI, MONTGOMERY, PREBLE*, SHELBY

Special Jurisdictional Note : In Preble County the following townships are included: (Jackson, Monroe, Harrison, Twin and Washington)

Details :

Tile Layer Finishers shall do mixing of mortars & adhesives,cleaning & grouting of tile,unloading of all trucks,unpacking & handling of all tile & materials such as sand,lime,cement,tile,& all types of tile panels, prefabricated on job site. Marble Setter Finishers shall do all cleaning,waxing & polishing,grouting and pointing.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Bricklayer Local 22 Tile Mechanics

Change # : LCN01-2020fbLoc22

Craft : Bricklayer **Effective Date :** 07/01/2020 **Last Posted :** 06/25/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Bricklayer Tile Marble Terrazzo Mechanics	$27.20		$7.72	$5.52	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$40.95	$54.55
Terrazzo Worker	$27.20		$7.72	$5.52	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$40.95	$54.55
Apprentice	**Percent**											
1st 6 Months	50.00	$13.60	$7.72	$0.00	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$21.83	$28.63
2nd 6 Months	55.00	$14.96	$7.72	$0.00	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$23.19	$30.67
3rd 6 Months	60.00	$16.32	$7.72	$5.52	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$30.07	$38.23
4th 6 Months	65.00	$17.68	$7.72	$5.52	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$31.43	$40.27
5th 6 months	70.00	$19.04	$7.72	$5.52	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$32.79	$42.31
6th 6 months	75.00	$20.40	$7.72	$5.52	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$34.15	$44.35
7th 6 months	85.00	$23.12	$7.72	$5.52	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$36.87	$48.43
8th 6 months	95.00	$25.84	$7.72	$5.52	$0.51	$0.00	$0.00	$0.00	$0.00	$0.00	$39.59	$52.51

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 :

5 Journeymen to 1 Apprentice
10 Journeymen to 2 Apprentice
15 Journeymen to 3 Apprentice
20 Journeymen to 4 Apprentice
25 Journeymen to 5 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, HIGHLAND, LOGAN, MIAMI, MONTGOMERY, PREBLE*, SHELBY

Special Jurisdictional Note : In Preble County the following townships are included: (Jackson, Jefferson, Monroe, Harrison, Twin and Washington)

Details :

**(Tile layers work)the laying,cutting or setting of all tile where used for floors,walls, ceilings, walks, promenade roofs,stair treads,stair risers,facings,hearths,fireplaces & decorative inserts together with any marble plinths, thresholds or window stools used in connection with any tile work.the building, shaping forming construction or repairing of all fireplace work, whether in connection with a mantel hearth facing or not, & the setting & preparing of all material such as cement,plaster,mortar,brickwork,iron work or other materials necessary for the proper,safe construction & completion of such work:except that a mantel made exclusively of brick, marble or stone shall be conceded to be bricklayers,marble setters or stonemasons' work respectively.

**Marble,mosaic,venetian enamel & terrazzo. Cutting and assembling of mosaics.all rolling of terrazzo work.
**Caulking of all expansion,perimeter & angle joints shall be the exclusive work of the tile mechanic.
**Marble masons shall consist of carving,cutting & setting of all marble,slate (including blackboards) stone, albereen, carrara, sanionyx, vitrolite & similar opaque glass, scagliola, what ever thickness or dimension.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter & Pile Driver SW District HevHwy

Change # : LCN01-2020fbLoc126

Craft : Carpenter **Effective Date :** 05/07/2020 **Last Posted :** 05/07/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter	$31.01		$7.89	$6.95	$0.40	$0.00	$2.82	$0.12	$0.00	$0.00	$49.19	$64.70
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	$18.61	$7.89	$6.95	$0.40	$0.00	$2.82	$0.12	$0.00	$0.00	$36.79	$46.09
2nd 6 Months is 1st year	65.00	$20.16	$7.89	$6.95	$0.40	$0.00	$2.82	$0.12	$0.00	$0.00	$38.34	$48.41
3rd 6 Months	70.00	$21.71	$7.89	$6.95	$0.40	$0.00	$2.82	$0.12	$0.00	$0.00	$39.89	$50.74
4th 6 Months is 2 years	75.00	$23.26	$7.89	$6.95	$0.40	$0.00	$2.82	$0.12	$0.00	$0.00	$41.44	$53.07
5th 6 Months	80.00	$24.81	$7.89	$6.95	$0.40	$0.00	$2.82	$0.12	$0.00	$0.00	$42.99	$55.39
6th 6 Months is 3 years	85.00	$26.36	$7.89	$6.95	$0.40	$0.00	$2.82	$0.12	$0.00	$0.00	$44.54	$57.72
7th 6 Months	90.00	$27.91	$7.89	$6.95	$0.40	$0.00	$2.82	$0.12	$0.00	$0.00	$46.09	$60.04
8th 6 Months is 4 years	95.00	$29.46	$7.89	$6.95	$0.40	$0.00	$2.82	$0.12	$0.00	$0.00	$47.64	$62.37

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 employed, and 1 (1) Apprentice for two (2) Journeyman Carpenter for additional Apprectices employed.
Thereafter, every third additonal carpenter hired shall be

Jurisdiction (* denotes special jurisdictional note) :

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

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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter & Pile Driver
SW Zone 1

Change # : LCN01-2020fbLoc126

Craft : Carpenter **Effective Date :** 06/18/2020 **Last Posted :** 06/18/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter	$27.87		$7.81	$6.95	$0.38	$0.00	$1.64	$0.17	$0.00	$0.00	$44.82	$58.76
Pile Driver	$25.84		$6.62	$6.95	$0.40	$0.00	$0.91	$0.10	$0.00	$0.00	$40.82	$53.74
Apprentice	**Percent**											
1st 3 Months	60.00	$16.72	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$16.72	$25.08
2nd 3 Months	60.00	$16.72	$7.81	$0.00	$0.38	$0.00	$1.64	$0.17	$0.00	$0.00	$26.72	$35.08
2rd 6 Months	60.00	$16.72	$7.81	$0.00	$0.38	$0.00	$1.64	$0.17	$0.00	$0.00	$26.72	$35.08
3th 6 Months	65.00	$18.12	$7.81	$0.00	$0.38	$0.00	$1.64	$0.17	$0.00	$0.00	$28.12	$37.17
4th 6 Months	65.00	$18.12	$7.81	$0.00	$0.38	$0.00	$1.64	$0.17	$0.00	$0.00	$28.12	$37.17
5th 6 Months	70.00	$19.51	$7.81	$6.95	$0.38	$0.00	$1.64	$0.17	$0.00	$0.00	$36.46	$46.21
6th 6 Months	75.00	$20.90	$7.81	$6.95	$0.38	$0.00	$1.64	$0.17	$0.00	$0.00	$37.85	$48.30
7th 6 Months	80.00	$22.30	$7.81	$6.95	$0.38	$0.00	$1.64	$0.17	$0.00	$0.00	$39.25	$50.39
8th 6 Months	85.00	$23.69	$7.81	$6.95	$0.38	$0.00	$1.64	$0.17	$0.00	$0.00	$40.64	$52.48

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) :
CHAMPAIGN, CLARK, DARKE, GREENE, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY

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 floorlayers.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter Floorlayer SW District G

Change # : LCR01-2020fbLocSWDayton

Craft : Carpenter **Effective Date :** 09/10/2020 **Last Posted :** 09/10/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Floorlayer	$26.36		$7.80	$6.95	$0.40	$0.00	$1.70	$0.12	$0.00	$0.00	$43.33	$56.51
Apprentice	**Percent**											
1st 3 months	60.00	$15.82	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$15.82	$23.72
2nd 3 months	60.00	$15.82	$7.80	$0.00	$0.40	$0.00	$1.70	$0.12	$0.00	$0.00	$25.84	$33.74
2nd 6 months	60.00	$15.82	$7.80	$0.00	$0.40	$0.00	$1.70	$0.12	$0.00	$0.00	$25.84	$33.74
3rd 6 months	60.00	$15.82	$7.80	$0.00	$0.40	$0.00	$1.70	$0.12	$0.00	$0.00	$25.84	$33.74
4th 6 months	65.00	$17.13	$7.80	$0.00	$0.40	$0.00	$1.70	$0.12	$0.00	$0.00	$27.15	$35.72
5th 6 months	70.00	$18.45	$7.80	$6.95	$0.40	$0.00	$1.70	$0.12	$0.00	$0.00	$35.42	$44.65
6th 6 months	75.00	$19.77	$7.80	$6.95	$0.40	$0.00	$1.70	$0.12	$0.00	$0.00	$36.74	$46.63
7th 6 months	80.00	$21.09	$7.80	$6.95	$0.40	$0.00	$1.70	$0.12	$0.00	$0.00	$38.06	$48.60
8th 6 months	85.00	$22.41	$7.80	$6.95	$0.40	$0.00	$1.70	$0.12	$0.00	$0.00	$39.38	$50.58

Special Calculation Note : Other fs for UBC National Fund and Install

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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter Millwright Local 1090 SW Zone II

Change # : LCN01-2020fbLoc1066

Craft : Carpenter **Effective Date :** 09/10/2020 **Last Posted :** 09/10/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter Millwright	$31.05		$7.78	$6.95	$0.44	$0.00	$6.63	$0.25	$0.00	$0.00	$53.10	$68.62
Apprentice	**Percent**											
1st 6 months	60.00	$18.63	$7.78	$4.27	$0.44	$0.00	$3.98	$0.25	$0.00	$0.00	$35.35	$44.67
2nd 6 months	65.00	$20.18	$7.78	$4.61	$0.44	$0.00	$4.31	$0.25	$0.00	$0.00	$37.57	$47.66
3rd 6 months	70.00	$21.73	$7.78	$4.94	$0.44	$0.00	$4.64	$0.25	$0.00	$0.00	$39.78	$50.65
4th 6 months	75.00	$23.29	$7.78	$5.28	$0.44	$0.00	$4.97	$0.25	$0.00	$0.00	$42.01	$53.65
5th 6 months	80.00	$24.84	$7.78	$5.61	$0.44	$0.00	$5.30	$0.25	$0.00	$0.00	$44.22	$56.64
6th 6 months	85.00	$26.39	$7.78	$5.95	$0.44	$0.00	$5.64	$0.25	$0.00	$0.00	$46.45	$59.65
7th 6 months	90.00	$27.94	$7.78	$6.28	$0.44	$0.00	$5.97	$0.25	$0.00	$0.00	$48.67	$62.64
8th 6 months	95.00	$29.50	$7.78	$6.62	$0.44	$0.00	$6.30	$0.25	$0.00	$0.00	$50.89	$65.64

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

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, DARKE, GREENE, LOGAN, MIAMI, MONTGOMERY, PREBLE, SHELBY

Special Jurisdictional Note :

Details :

SHELBY

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Carpenter NE District Industrial Dock & Door

Change # : LCN01-2014fbCarpNEStatewide

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

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Carpenter	$19.70		$5.05	$1.00	$0.15	$0.00	$0.00	$0.00	$0.00	$0.00	$25.90	$35.75
Trainee	**Percent**											
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

Prevailing Wage Rate
Skilled Crafts

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

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason Bricklayer Sewer Water Works A	$29.34		$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 :

Details :

(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.

Prevailing Wage Rate
Skilled Crafts

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

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason Bricklayer Power Plants Tunnels Amusement Parks B	$30.33		$9.25	$6.41	$0.46	$0.00	$0.00	$0.00	$0.00	$0.00	$46.45	$61.62
Apprentice	**Percent**											
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 :

Details :

(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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Cement Mason Local 132 (Dayton)

Change # : LCN01-2019fbLoc132

Craft : Cement **Effective Date :** 06/05/2019 **Last Posted :** 06/05/2019

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason	$23.93		$7.50	$6.65	$0.70	$0.00	$2.25	$0.00	$0.00	$0.00	$41.03	$53.00
Apprentice	**Percent**											
1st yr	70.00	$16.75	$7.50	$6.65	$0.70	$0.00	$2.25	$0.00	$0.00	$0.00	$33.85	$42.23
2nd yr	80.00	$19.14	$7.50	$6.65	$0.70	$0.00	$2.25	$0.00	$0.00	$0.00	$36.24	$45.82
3rd yr	90.00	$21.54	$7.50	$6.65	$0.70	$0.00	$2.25	$0.00	$0.00	$0.00	$38.64	$49.41

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

Ratio :

2 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, SHELBY

Special Jurisdictional Note :

Details :

Other: Is Industry Promotion:Cement Masons on outrigger, swing, scaffolds, manlifts -$.75 per hour above scale up to (25) feet and $.75 per hour for each additional (25) feet or part of same. A Cement Mason operating a grinder- $.30 per hour above the journeyman scale.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Cement Mason Bricklayer Local 97 HevHwy A

Change # : LCN01-2020fbHvyHwy

Craft : Bricklayer **Effective Date :** 06/01/2020 **Last Posted :** 05/21/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason Bricklayer Sewer Water Works A	$29.96		$9.50	$6.77	$0.47	$0.00	$0.00	$0.00	$0.00	$0.00	$46.70	$61.68
Apprentice	**Percent**											
1st year	50.00	$14.98	$9.50	$6.77	$0.47	$0.00	$0.00	$0.00	$0.00	$0.00	$31.72	$39.21
2nd year	70.00	$20.97	$9.50	$6.77	$0.47	$0.00	$0.00	$0.00	$0.00	$0.00	$37.71	$48.20
3rd year	90.00	$26.96	$9.50	$6.77	$0.47	$0.00	$0.00	$0.00	$0.00	$0.00	$43.70	$57.19

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 :

Details :

(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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Cement Mason Bricklayer Local 97 HevHwy B

Change # : LCN01-2020fbHvyHwy

Craft : Bricklayer **Effective Date :** 06/01/2020 **Last Posted :** 05/21/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Cement Mason Bricklayer Power Plants Tunnels Amusement Parks B	$30.95		$9.50	$6.77	$0.48	$0.00	$0.00	$0.00	$0.00	$0.00	$47.70	$63.17
Apprentice	**Percent**											
1st year	50.00	$15.48	$9.50	$6.77	$0.48	$0.00	$0.00	$0.00	$0.00	$0.00	$32.23	$39.96
2nd year	70.00	$21.66	$9.50	$6.77	$0.48	$0.00	$0.00	$0.00	$0.00	$0.00	$38.42	$49.25
3rd year	90.00	$27.85	$9.50	$6.77	$0.48	$0.00	$0.00	$0.00	$0.00	$0.00	$44.60	$58.53

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 :

Details :

(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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 71 DOT Traffic Signal Highway Lighting American Line Builders

Change # : LCRO1-2020fbLoc71DOTClev

Craft : Lineman **Effective Date :** 11/04/2020 **Last Posted :** 11/04/2020

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
Electrical Lineman	$39.23	$6.50	$1.18	$0.39	$0.00	$7.06	$0.06	$0.00	$0.00	$54.42	$74.04
Traffic Signal & Lighting Journeyman	$37.73	$6.50	$1.13	$0.38	$0.00	$6.79	$0.06	$0.00	$0.00	$52.59	$71.45
Equipment Operator	$34.46	$6.50	$1.03	$0.34	$0.00	$6.20	$0.06	$0.00	$0.00	$48.59	$65.82
Groundman 0 to 12 months (W/O CDL)	$20.90	$6.50	$0.63	$0.21	$0.00	$3.76	$0.06	$0.00	$0.00	$32.06	$42.51
Groundman 0 to 12 Months (W CDL)	$22.83	$6.50	$0.68	$0.23	$0.00	$4.11	$0.06	$0.00	$0.00	$34.41	$45.82
Groundman greater than 1 year (W CDL)	$24.77	$6.50	$0.74	$0.25	$0.00	$4.46	$0.06	$0.00	$0.00	$36.78	$49.17
Traffic Apprentice											
1st 1000 hrs	$22.64	$6.50	$0.68	$0.23	$0.00	$4.08	$0.06	$0.00	$0.00	$34.19	$45.51
2nd 1000 hrs	$24.52	$6.50	$0.74	$0.25	$0.00	$4.41	$0.06	$0.00	$0.00	$36.48	$48.74
3rd 1000 hrs	$26.41	$6.50	$0.79	$0.26	$0.00	$4.75	$0.06	$0.00	$0.00	$38.77	$51.98
4th 1000 hrs	$28.30	$6.50	$0.85	$0.28	$0.00	$5.09	$0.06	$0.00	$0.00	$41.08	$55.23
5th 1000 hrs	$30.18	$6.50	$0.91	$0.30	$0.00	$5.43	$0.06	$0.00	$0.00	$43.38	$58.47
6th 1000 hrs	$33.96	$6.50	$1.02	$0.34	$0.00	$6.11	$0.06	$0.00	$0.00	$47.99	$64.97
Lineman	**Percent**										

Apprentice												
1st 1,000 Hours	60.00	$23.54	$6.50	$0.71	$0.24	$0.00	$4.24	$0.06	$0.00	$0.00	$35.29	$47.06
2nd 1,000 Hours	65.00	$25.50	$6.50	$0.77	$0.26	$0.00	$4.59	$0.06	$0.00	$0.00	$37.68	$50.43
3rd 1,000 Hours	70.00	$27.46	$6.50	$0.82	$0.27	$0.00	$4.94	$0.06	$0.00	$0.00	$40.05	$53.78
4th 1,000 Hours	75.00	$29.42	$6.50	$0.88	$0.29	$0.00	$5.30	$0.06	$0.00	$0.00	$42.45	$57.16
5th 1,000 Hours	80.00	$31.38	$6.50	$0.94	$0.31	$0.00	$5.65	$0.06	$0.00	$0.00	$44.84	$60.54
6th 1,000 Hours	85.00	$33.35	$6.50	$1.00	$0.33	$0.00	$6.00	$0.06	$0.00	$0.00	$47.24	$63.91
7th 1,000 Hours	90.00	$35.31	$6.50	$1.06	$0.35	$0.00	$6.36	$0.06	$0.00	$0.00	$49.64	$67.29

Special Calculation Note : Other is for Safety and Education Fund

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

AUGLAIZE, CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, LOGAN, MERCER, MIAMI, MONTGOMERY, PREBLE, SHELBY

Special Jurisdictional Note :

Details :

A groundman when directed shall assist a Journeymen in the performance of his/her work on the ground, including the use of hand tools. Under no circumstances shall this classification climb poles, towers, ladders, or work from an elevated platform or bucket truck. This classification shall not perform work normally assigned to an apprentice lineman. 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.

Prevailing Wage Rate
Skilled Crafts

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

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
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	$28.26	$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	$27.93		$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	**Percent**											
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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 71 Outside Utility Power

Change # : LCN01-2019fbLoc7

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

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
Electrical Lineman	$41.22	$6.00	$1.24	$0.41	$0.00	$9.48	$0.35	$0.00	$0.00	$58.70	$79.31
Substation Technician	$41.22	$6.00	$1.24	$0.41	$0.00	$9.48	$0.35	$0.00	$0.00	$58.70	$79.31
Cable Splicer	$43.14	$6.00	$1.29	$0.43	$0.00	$9.92	$0.35	$0.00	$0.00	$61.13	$82.70
Operator A	$37.00	$6.00	$1.11	$0.37	$0.00	$8.51	$0.35	$0.00	$0.00	$53.34	$71.84
Operator B	$32.78	$6.00	$0.98	$0.33	$0.00	$7.54	$0.35	$0.00	$0.00	$47.98	$64.37
Operator C	$26.44	$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	$20.61	$6.00	$0.62	$0.21	$0.00	$4.74	$0.35	$0.00	$0.00	$32.53	$42.84
Groundman 0-12 months Exp w/CDL	$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	$22.67	$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	$26.80	$6.00	$0.80	$0.27	$0.00	$6.16	$0.35	$0.00	$0.00	$40.38	$53.78
Equipment Mechanic	$32.78	$6.00	$0.98	$0.33	$0.00	$7.54	$0.35	$0.00	$0.00	$47.98	$64.37

A											
Equipment Mechanic B	$29.62	$6.00	$0.89	$0.30	$0.00	$6.81	$0.35	$0.00	$0.00	$43.97	$58.78
Equipment Mechanic C	$26.44	$6.00	$0.79	$0.26	$0.00	$6.08	$0.35	$0.00	$0.00	$39.92	$53.14
Line Truck w/uuger	$29.17	$6.00	$0.88	$0.29	$0.00	$6.71	$0.35	$0.00	$0.00	$43.40	$57.99

Apprentice	**Percent**										
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.

Prevailing Wage Rate
Skilled Crafts

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	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 683 Inside

Change # : LCN02-2020fbbLoc683In

Craft : Electrical **Effective Date :** 06/04/2020 **Last Posted :** 06/04/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrician	$34.50		$10.10	$7.56	$0.80	$0.00	$2.60	$0.00	$0.00	$0.00	$55.56	$72.81
Welding	$35.50		$10.10	$7.59	$0.80	$0.00	$2.60	$0.00	$0.00	$0.00	$56.59	$74.34
Mdium Voltage Splicing	$35.50		$10.10	$7.59	$0.80	$0.00	$2.60	$0.00	$0.00	$0.00	$56.59	$74.34
Over 100 feet	$51.75		$10.10	$8.07	$0.80	$0.00	$2.60	$0.00	$0.00	$0.00	$73.32	$99.19
Level 1 CW 0 to 2000 hours	$11.22		$6.15	$0.34	$0.67	$0.00	$0.34	$0.10	$0.00	$0.00	$18.82	$24.43
Level 2 CW 2001 to 4000 hours	$12.03		$6.15	$0.36	$0.67	$0.00	$0.36	$0.10	$0.00	$0.00	$19.67	$25.69
Level 3 CW 4001 to 6000 hours	$12.83		$6.15	$0.38	$0.67	$0.00	$0.38	$0.10	$0.00	$0.00	$20.51	$26.93
Level 4 CW 6001 to 8000 hours	$14.43		$6.15	$0.43	$0.67	$0.00	$0.43	$0.10	$0.00	$0.00	$22.21	$29.43
Level 1 CE 8001 to 10000 hours	$16.04		$6.15	$0.48	$0.67	$0.00	$0.48	$0.10	$0.00	$0.00	$23.92	$31.94
Level 2 CE 10,001 to 12,000 hours	$17.64		$6.15	$0.53	$0.67	$0.00	$0.53	$0.10	$0.00	$0.00	$25.62	$34.44
Level 3 CE 12,001 to14,000 hours	$22.45		$6.15	$0.67	$0.67	$0.00	$0.67	$0.10	$0.00	$0.00	$30.71	$41.94
Apprentice	**Percent**											
0-1000 hrs	40.00	$13.80	$10.10	$3.02	$0.80	$0.00	$1.04	$0.00	$0.00	$0.00	$28.76	$35.66

1st Period												
1001-2000 hrs 2nd Period	40.00	$13.80	$10.10	$3.02	$0.80	$0.00	$1.04	$0.00	$0.00	$0.00	$28.76	$35.66
2001-3500 hrs 3rd Period	50.00	$17.25	$10.10	$3.78	$0.80	$0.00	$1.30	$0.00	$0.00	$0.00	$33.23	$41.85
3501-5000 hrs 4th Period	55.00	$18.98	$10.10	$4.16	$0.80	$0.00	$1.43	$0.00	$0.00	$0.00	$35.46	$44.95
5001-6500 hrs 5th Period	65.00	$22.42	$10.10	$4.91	$0.80	$0.00	$1.69	$0.00	$0.00	$0.00	$39.92	$51.14
6501-8000 hrs 6th Period	80.00	$27.60	$10.10	$6.05	$0.80	$0.00	$2.08	$0.00	$0.00	$0.00	$46.63	$60.43

Special Calculation Note : Other is Education Fund

Ratio :

1 to 3 Journeyman to 2 Apprentices
4 to 6 Journeyman to 4 Apprentices

Ratio
Construction Wireman and Construction Electrician
1 Journeyman to 2 Apprentices to 2 CW/CE
With a MAXIMUM of 6 CW/CE an on any jobsite

Construction Wireman and Construction Electricians may work on residential projects without working under the supervision of a Journeyman Wireman. On ALL other job sites, Construction Wireman and Construction Electricians CAN only be employed after an APPRENTICE IS EMPLOYED on the job site.

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, DELAWARE, FAIRFIELD, FRANKLIN, MADISON, PICKAWAY*, UNION

Special Jurisdictional Note : In Pickaway County the following townships: Circleville,Darby,Harrison,Jackson,Madison,Monroe,Muhlenberg,Scioto,Walnut,Washington.

Details :

Special Jurisdictional Note : In Pickaway County the following townships: Circleville,Darby,Harrison,Jackson,Madison,Monroe,Muhlenberg,Scioto,Walnut,Washington.

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 683 Inside Lt Commercial South West

Change # : LCN02-2020fbLoc683In

Craft : Electrical **Effective Date :** 06/04/2020 **Last Posted :** 06/04/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrician	$34.50		$10.10	$7.56	$0.80	$0.00	$2.60	$0.00	$0.00	$0.00	$55.56	$72.81
Welding	$35.50		$10.10	$7.59	$0.80	$0.00	$2.60	$0.00	$0.00	$0.00	$56.59	$74.34
Medium Voltage Splicing	$35.50		$10.10	$7.59	$0.80	$0.00	$2.60	$0.00	$0.00	$0.00	$56.59	$74.34
Over 100 feet	$51.75		$10.10	$8.07	$0.80	$0.00	$2.60	$0.00	$0.00	$0.00	$73.32	$99.19
CE-3 12,001-14,000 Hrs	$22.45		$6.15	$0.67	$0.67	$0.00	$0.67	$0.10	$0.00	$0.00	$30.71	$41.94
CE-2 10,001-12,000 Hrs	$17.64		$6.15	$0.53	$0.67	$0.00	$0.53	$0.10	$0.00	$0.00	$25.62	$34.44
CE-1 8,001-10,000 Hrs	$16.04		$6.15	$0.48	$0.67	$0.00	$0.48	$0.10	$0.00	$0.00	$23.92	$31.94
CW-4 6,001-8,000 Hrs	$14.43		$6.15	$0.43	$0.67	$0.00	$0.43	$0.10	$0.00	$0.00	$22.21	$29.43
CW-3 4,001-6,000 Hrs	$12.83		$6.15	$0.38	$0.67	$0.00	$0.38	$0.10	$0.00	$0.00	$20.51	$26.93
CW-2 2,001-4,000 Hrs	$12.03		$6.15	$0.36	$0.67	$0.00	$0.36	$0.10	$0.00	$0.00	$19.67	$25.69
CW-1 0-2,000 Hrs	$11.22		$6.15	$0.34	$0.67	$0.00	$0.34	$0.10	$0.00	$0.00	$18.82	$24.43
Apprentice	**Percent**											
0-1000 hrs 1st Period	40.00	$13.80	$10.10	$3.02	$0.80	$0.00	$1.04	$0.00	$0.00	$0.00	$28.76	$35.66
1001-2000 hrs 2nd Period	40.00	$13.80	$10.10	$3.02	$0.80	$0.00	$1.04	$0.00	$0.00	$0.00	$28.76	$35.66
2001-3500 hrs 3rd	50.00	$17.25	$10.10	$3.78	$0.80	$0.00	$1.30	$0.00	$0.00	$0.00	$33.23	$41.85

Period												
3501-5000 hrs 4th Period	55.00	$18.98	$10.10	$4.16	$0.80	$0.00	$1.43	$0.00	$0.00	$0.00	$35.46	$44.95
5001-6500 hrs 5th Period	65.00	$22.42	$10.10	$4.91	$0.80	$0.00	$1.69	$0.00	$0.00	$0.00	$39.92	$51.14
6501-8000 hrs 6th Period	80.00	$27.60	$10.10	$6.05	$0.80	$0.00	$2.08	$0.00	$0.00	$0.00	$46.63	$60.43

Special Calculation Note : Other is Education Fund

Ratio :

2 Apprentices for every 3 Journeyman Wireman or fraction thereof;
1 to 3 Journeyman to 2 Apprentices
4 to 6 Journeyman to 4 Apprentices

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) :
CHAMPAIGN, CLARK, DELAWARE, FAIRFIELD, FRANKLIN, MADISON, PICKAWAY*, UNION

Special Jurisdictional Note : In Pickaway County the following townships: Circleville,Darby,Harrison,Jackson,Madison,Monroe,Muhlenberg,Scioto,Walnut,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 :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Electrical Local 683 Voice Data Video

Change # : LCR01-2020fbLoc683VDV

Craft : Voice Data Video **Effective Date :** 06/04/2020 **Last Posted :** 06/04/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Electrical Installer Technician B	$26.50		$8.52	$0.80	$0.80	$0.51	$2.25	$0.61	$0.00	$0.00	$39.99	$53.24
Installer Technician A	$27.50		$8.52	$0.83	$0.80	$0.53	$2.25	$0.64	$0.00	$0.00	$41.07	$54.82
Cable Puller	$13.72		$8.52	$0.41	$0.80	$0.26	$2.25	$0.32	$0.00	$0.00	$26.28	$33.14
Apprentices	**Percent**											
1st 750 hours	55.00	$14.58	$8.52	$0.44	$0.80	$0.28	$2.25	$0.34	$0.00	$0.00	$27.21	$34.49
2nd 750 hours	60.00	$15.90	$8.52	$0.48	$0.80	$0.31	$2.25	$0.37	$0.00	$0.00	$28.63	$36.58
3rd 750 hours	65.00	$17.23	$8.52	$0.52	$0.80	$0.33	$2.25	$0.40	$0.00	$0.00	$30.04	$38.66
4th 750 hours	70.00	$18.55	$8.52	$0.56	$0.80	$0.36	$2.25	$0.43	$0.00	$0.00	$31.47	$40.75
5th 750 hours	75.00	$19.87	$8.52	$0.60	$0.80	$0.38	$2.25	$0.46	$0.00	$0.00	$32.89	$42.82
6th 750 hours	80.00	$21.20	$8.52	$0.64	$0.80	$0.41	$2.25	$0.49	$0.00	$0.00	$34.31	$44.91

Special Calculation Note : Other is Holiday Pay. Vacation applies only to employees who work for one employer for a period of one year.

Ratio :

1 Apprentice for every 1 Installer Technician

Cable Pullers can only be employed after an apprentice is employed on the job

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, DELAWARE, FAIRFIELD, FRANKLIN, MADISON, PICKAWAY*, UNION

Special Jurisdictional Note : In Pickaway County the following townships: Circleville, Darby, Harrison, Jackson, Madison, Monroe, Muhlenberg, Scioto, Walnut, Washington.

Details :

An employee who is required to wear an electronic device after hours will receive an additional 1.00 per hour for all hours worked.

HOLIDAYS: Memorial Day, 4th of July, Labor Day, Thanksgiving Day, Christmas Day, New Years Day.

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

- Installation of computer systems in industrial applications such as assembly lines, robotics, computer controller manufacturing systems.

- Installation of conduit &/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 foot.

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

- All HVAC control work.

TECHNICIAN (A) is a Technician B who holds a current Technician Certification from BICSI (Building Industry Consulting Service International, Inc.)

CABLE PULLERS are for the installation of cable from one termination point to another.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Elevator Local 37

Change # : LCR01-2020fbLoc37

Craft : Elevator **Effective Date :** 01/22/2020 **Last Posted :** 01/22/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Elevator Mechanic	$47.16		$15.73	$10.21	$0.63	$3.77	$8.20	$1.93	$0.00	$0.00	$87.63	$111.21
Helper	$33.01		$15.73	$10.21	$0.63	$2.64	$8.20	$1.50	$0.00	$0.00	$71.92	$88.43
Apprentice	**Percent**											
Probationary Apprentice	50.00	$23.58	$0.00	$0.00	$0.00	$1.41	$0.00	$0.00	$0.00	$0.00	$24.99	$36.78
1st year	55.00	$25.94	$15.73	$10.21	$0.63	$1.56	$8.20	$1.28	$0.00	$0.00	$63.55	$76.52
2nd year	65.00	$30.65	$15.73	$10.21	$0.63	$1.84	$8.20	$1.42	$0.00	$0.00	$68.68	$84.01
3rd year	70.00	$33.01	$15.73	$10.21	$0.63	$1.98	$8.20	$1.50	$0.00	$0.00	$71.26	$87.77
4th year	80.00	$37.73	$15.73	$10.21	$0.63	$2.26	$8.20	$1.64	$0.00	$0.00	$76.40	$95.26
Assistant Mechanic	80.00	$37.73	$15.73	$10.21	$0.63	$3.02	$8.20	$1.64	$0.00	$0.00	$77.16	$96.02

Special Calculation Note : Other is for Holiday Pay

Ratio :

1 Journeyman to 1 Apprentice**
1 Journeyman to 1 Helper**
1 Journeyman to 1 Assistant Mechanic**

Jurisdiction (* denotes special jurisdictional note) :

ATHENS, CHAMPAIGN, CLARK, DELAWARE, FAIRFIELD, FAYETTE, FRANKLIN, GALLIA, GUERNSEY, HOCKING, JACKSON, KNOX, LAWRENCE, LICKING, LOGAN, MADISON, MARION, MEIGS, MORGAN, MORROW, MUSKINGUM, NOBLE, PERRY, PICKAWAY, PIKE, ROSS, UNION, VINTON

Special Jurisdictional Note :

Details :

**Art. 10 Par. 2 Apprentice Work Qualifications:
Par 2- The total number of Helpers and Apprentices employed shall not exceed the number of Mechanics on any one job, except on jobs where two teams or more are working, one extra Helper or Apprentice may be employed for the first two teams and an extra Helper or Apprentice for each additional three teams.
Further, the Company may use as many Helpers and Apprentices as best suits his convenience under the direction of a Mechanic in wrecking old plants and in handling and hoisting material, and on foundation work. When removing old and installing new cable on existing elevator installations, the Company may use two Helpers or Apprentices to one Mechanic.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Glazier Local 387

Change # : LCN01-2020fbLoc387

Craft : Glazier **Effective Date :** 11/01/2020 **Last Posted :** 10/28/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Glazier	$27.93		$5.67	$10.10	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$43.95	$57.92
Apprentice	**Percent**											
1st 6 months	53.70	$15.00	$5.67	$0.00	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$20.92	$28.42
2nd 6 months	65.00	$18.15	$5.67	$6.19	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$30.26	$39.34
3rd 6 months	70.00	$19.55	$5.67	$6.71	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$32.18	$41.96
4th 6 months	75.00	$20.95	$5.67	$6.85	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$33.72	$44.19
5th 6 months	80.00	$22.34	$5.67	$7.43	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$35.69	$46.87
6th 6 months	85.00	$23.74	$5.67	$7.57	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$37.23	$49.10
7th 6 months	90.00	$25.14	$5.67	$8.09	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$39.15	$51.72
8th 6 months	95.00	$26.53	$5.67	$8.68	$0.25	$0.00	$0.00	$0.00	$0.00	$0.00	$41.13	$54.40

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 the following ratio to journeymen workers employed.
1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

ADAMS, BROWN, BUTLER, CHAMPAIGN, CLARK, CLERMONT, CLINTON, DARKE, 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.

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Ironworker Local 172

Change # : LCN02-2020fbLoc172

Craft : Ironworker **Effective Date :** 08/20/2020 **Last Posted :** 08/20/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Ironworker	$30.75		$8.30	$9.50	$1.14	$0.00	$3.00	$0.00	$0.00	$0.00	$52.69	$68.06
Rigger Welder Reinforcing Sheeter Fence Erector Machinery Mover	$30.75		$8.30	$9.50	$1.14	$0.00	$3.00	$0.00	$0.00	$0.00	$52.69	$68.06
Apprentice	**Percent**											
1st YEAR 0 - 6 Months	60.00	$18.45	$8.30	$9.50	$1.14	$0.00	$3.00	$0.00	$0.00	$0.00	$40.39	$49.61
2nd YEAR 13 - 18 Months	70.00	$21.52	$8.30	$9.50	$1.14	$0.00	$3.00	$0.00	$0.00	$0.00	$43.47	$54.23
3rd YEAR 25 - 30 Months	80.00	$24.60	$8.30	$9.50	$1.14	$0.00	$3.00	$0.00	$0.00	$0.00	$46.54	$58.84
4th YEAR 37 - 42 Months	90.00	$27.67	$8.30	$9.50	$1.14	$0.00	$3.00	$0.00	$0.00	$0.00	$49.62	$63.45

Special Calculation Note :

Ratio :

Rod Work
3 Journeymen to 1 Apprentice

Structural Work
3 Journeymen to 1 Apprentice

Finishing, Steel Sash, Stairway and Ornamental
1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN*, CLARK, CRAWFORD*, DELAWARE, FAIRFIELD, FAYETTE*, FRANKLIN, HARDIN*, HIGHLAND*, HOCKING, JACKSON*, KNOX, LICKING, LOGAN*, MADISON*, MARION, MORROW, PERRY, PICKAWAY, PIKE, ROSS, UNION, VINTON, WYANDOT*

Sheet Gang
1 Apprentice for every sheeting gang per project

Special Jurisdictional Note : Champaign County Twps included: Wayne, Rush, Goshen. Crawford County Twps included: Bucyrus, Dallas, Jefferson, Jackson, Whetstone, Polk, Sandusky. Fayette County Twps included: Paint, Marion, Perry, Madison, Wayne, Union. Hardin County Twps included: McDonald, Taylorcreek, Hale, Dudley, Pleasant, Goshen, Blanchard, Lynn, Jackson, Buck, Cessna, Marion, Washington. Highland County Twps included: Madison. Jackson County Twps included: Liberty, Washington, Milton, Jackson, Coal, Wilkesville. Logan County Twps included: Monroe, Zane, Jefferson, Perry, Rush Creek, Bokes Creek. Madison County Twps included: Range, Paint, Fairfield, Sommerford, Jefferson, Pike, Canaan, Pleasant, Oak Run, Union, Deer Creek, Monroe, Darby. Pike County Twps included: Perry, Benton, Mifflin, Sunfish, Newton, Prebble, Pee Pee, Seal, Beaver, Jackson. Wyandot County Twps included: Jackson, Marseilles, Mifflin, Pitt, Antrim. Muskingum County includes:Jackson,Licking,Hope Well, Newton, Clay, Cass, Muskingum falls,Springfield,Madison,Washington,Wayne,Brush Creek.

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Ironworker Local 290

Change # : LCN01-2019fbLoc290

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

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Ironworker Structural	$29.23		$8.20	$9.50	$0.65	$0.00	$4.00	$0.02	$0.00	$0.00	$51.60	$66.21
Welder	$29.23		$8.20	$9.50	$0.65	$0.00	$4.00	$0.02	$0.00	$0.00	$51.60	$66.21
Fence Erector	$29.23		$8.20	$9.50	$0.65	$0.00	$4.00	$0.02	$0.00	$0.00	$51.60	$66.21
Reinforcing Rods	$29.23		$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	$29.23		$8.20	$9.50	$0.65	$0.00	$4.00	$0.02	$0.00	$0.00	$51.60	$66.21
Metal Building Erector	$29.23		$8.20	$9.50	$0.65	$0.00	$4.00	$0.02	$0.00	$0.00	$51.60	$66.21
Rigger & Erector	$29.29		$8.20	$9.50	$0.65	$0.00	$4.00	$0.02	$0.00	$0.00	$51.66	$66.30
Apprentice	**Percent**											
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 pre-engineered 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

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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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Labor HevHwy 3

Change # : LCN01-2020fbLocalHevHwy3

Craft : Laborer Group 1 **Effective Date :** 05/14/2020 **Last Posted :** 05/14/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Laborer Group 1	$32.62		$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$43.97	$60.28
Group 2	$32.79		$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$44.14	$60.54
Group 3	$33.12		$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$44.47	$61.03
Group 4	$33.57		$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$44.92	$61.71
Watch Person	$25.35		$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$36.70	$49.38
Apprentice	**Percent**											
0-1000 hrs	60.00	$19.57	$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$30.92	$40.71
1001-2000 hrs	70.00	$22.83	$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$34.18	$45.60
2001-3000 hrs	80.00	$26.10	$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$37.45	$50.49
3001-4000 hrs	90.00	$29.36	$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$40.71	$55.39
More than 4000 hrs	100.00	$32.62	$7.00	$3.80	$0.45	$0.00	$0.00	$0.00	$0.10	$0.00	$43.97	$60.28

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 memebers 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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Labor Local 1410 Building

Change # : LCN01-2019bLoc1410

Craft : Laborer **Effective Date :** 07/03/2019 **Last Posted :** 07/03/2019

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Laborer Group 1	$25.90		$7.00	$3.70	$0.40	$0.00	$0.00	$0.00	$0.10	$0.00	$37.10	$50.05
Group 2	$26.50		$7.00	$3.70	$0.40	$0.00	$0.00	$0.00	$0.10	$0.00	$37.70	$50.95
Group 3	$27.00		$7.00	$3.70	$0.40	$0.00	$0.00	$0.00	$0.10	$0.00	$38.20	$51.70
Apprentice	**Percent**											
Building Laborer 1-1000 hrs	60.00	$15.54	$7.00	$3.70	$0.40	$0.00	$0.00	$0.00	$0.10	$0.00	$26.74	$34.51
1001-2000	70.02	$18.14	$7.00	$3.70	$0.40	$0.00	$0.00	$0.00	$0.10	$0.00	$29.34	$38.40
2001-3000	80.00	$20.72	$7.00	$3.70	$0.40	$0.00	$0.00	$0.00	$0.10	$0.00	$31.92	$42.28
3001-4000	90.00	$23.31	$7.00	$3.70	$0.40	$0.00	$0.00	$0.00	$0.10	$0.00	$34.51	$46.17
More than 4000 hrs	100.00	$25.90	$7.00	$3.70	$0.40	$0.00	$0.00	$0.00	$0.10	$0.00	$37.10	$50.05

Special Calculation Note : $0.10 LECET is for Labor Management.

Ratio :

1 Journeymen to 1 Apprentice
4 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, DARKE, GREENE, LOGAN, MIAMI, MONTGOMERY, PREBLE

Special Jurisdictional Note :

Details :

Group 1
Building & Construction Laborer, Railroad Laborer, Asbestos & Hazardous Waste (Levels A,B,C, & D),Concrete Crew, Form Setter, Pipelayer, Bottom Man, Burner (Cutting Torch), Welder Helper, All Machine & Power Driven Tools, Sandblaster

Yardman-Landscaping,Sewer Jet, Waterperson, Tool Cage Laborer,Unloading Furniture & Fixtures,Final Clean-Up
Watchman, Residential Construction, Signal Men

Group 2
Mason Tender For Bricklayers, Flexcore, Firebrick Tender (Blast Furnaces,Soaking Pits,Stoves & Stacks), Plasterer Tenders & Lathers

Group 3
Tender Operator

Asbestos, Lead and Hazardous Material:
The removal, abatement or encapsulation of asbestos, lead and/or toxic and hazardous waste or materials is defined as all work included in the erection, moving servicing and dismantling of all enclosures, scaffolding, barricades, etc. and the operation of all tools and equipment (including generators, compressors and vacuums) normally used in the removal or abatement or asbestos, lead and toxic and hazardous waste or materials; the labeling, bagging, cartoning, crating or otherwise packaging of materials for disposal; as well as the clean-up of the work site and all other work incidental to the removal, abatement or encapsulation of asbestos, lead or toxic and hazardous waste materials.

Level A
Protective equipment is required when the area has been determined to contain extremely toxic contaminants or contaminants unknown but may be expected to be extremely toxic and/or immediately dangerous to life and health. This ensemble includes a fully encapsulated chemical suit, self contained breathing apparatus (SCBA) or airline fed respirator, and various types and numbers of boots and gloves.

Level B
Protective equipment includes a chemically resistant splash suit and a SCBA or airline respirator. This ensemble is required when the situation is very hazardous, such as oxygen deficient atmospheres, IDLH atmospheres, or confined space entries.

Level C
Protective equipment includes a protective suit and an air purifying respirator (APR) with the appropriate filter canisters.

Level D
To be worn only in established "safe zones" may consist of, from normal work clothes to normal skin protection such as gloves, face shields goggles, coveralls and occasionally respiratory protection.

Prevailing Wage Rate
Skilled Crafts

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

Change # : LCN01-2020fbLoc18zone3

Craft : Operating Engineer **Effective Date :** 05/14/2020 **Last Posted :** 05/14/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Operator Class 1	$38.24		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$53.69	$72.81
Class 2	$38.12		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$53.57	$72.63
Class 3	$37.08		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$52.53	$71.07
Class 4	$35.90		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$51.35	$69.30
Class 5	$30.44		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$45.89	$61.11
Class 6	$38.49		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$53.94	$73.18
Class 7	$38.74		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$54.19	$73.56
Class 8	$39.24		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$54.69	$74.31
Class 9	$39.49		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$54.94	$74.68
Apprentice	**Percent**											
1st Year	50.00	$19.12	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$34.57	$44.13
2nd Year	60.00	$22.94	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$38.39	$49.87
3rd Year	70.00	$26.77	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$42.22	$55.60
4th Year	80.00	$30.59	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$46.04	$61.34
Field Mechanic Trainee												
1st Year	50.00	$19.12	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$34.57	$44.13
2nd Year	60.00	$22.94	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$38.39	$49.87
3rd Year	70.00	$26.77	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$42.22	$55.60
4th Year	80.00	$30.59	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$46.04	$61.34

Special Calculation Note : Other: Education & Safety $0.09

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 apprenice, while employed as part of a crew per Article VIII, paragraph

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,

77, will not be subject to the apprenticeship ratios in this collective bargaining agreement	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; Bobcat-type 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 (Primary Operator with Specialized CDL Endorsement Add $3.00/ hour), 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

Class 9 - Boom & Jib 250 - or over

Prevailing Wage Rate
Skilled Crafts

Name of Union: Operating Engineers - HevHwy Zone II

Change # : LCN01-2020fbLoc18hevhwyII

Craft : Operating Engineer **Effective Date :** 05/14/2020 **Last Posted :** 05/14/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Operator Class 1	$38.24		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$53.69	$72.81
Class 2	$38.12		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$53.57	$72.63
Class 3	$37.08		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$52.53	$71.07
Class 4	$35.90		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$51.35	$69.30
Class 5	$30.44		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$45.89	$61.11
Class 6	$38.49		$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$53.94	$73.18
Apprentice	**Percent**											
1st Year	50.00	$19.12	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$34.57	$44.13
2nd Year	60.00	$22.94	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$38.39	$49.87
3rd Year	70.00	$26.77	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$42.22	$55.60
4th Year	80.00	$30.59	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$46.04	$61.34
Field Mech Trainee Class 2												
1st year	49.85	$19.06	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$34.51	$44.04
2nd year	59.80	$22.87	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$38.32	$49.75
3rd year	69.77	$26.68	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$42.13	$55.47
4th year	79.75	$30.50	$8.51	$6.00	$0.85	$0.00	$0.00	$0.09	$0.00	$0.00	$45.95	$61.19

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 (Primary Operator with Specialized CDL Endorsement Add $3.00/ hour), compact cranes: track or rubber under 4,000 pounds.

Class 6 - Master Mechanic

Prevailing Wage Rate
Skilled Crafts

Name of Union: Painter Local 249

Change # : LCN01-2019fbLoc249

Craft : Painter Effective Date : 05/01/2019 Last Posted : 04/17/2019

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Painter Brush Roll	$23.67		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$35.17	$47.01
Wall Covering Vinyl & Paper	$23.67		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$35.17	$47.01
Spray Commercial	$23.67		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$35.17	$47.01
Spray Industrial	$23.67		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$35.17	$47.01
Sandblasting, Steam Cleaning-Lead Abatment	$24.42		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$35.92	$48.13
Special Coating (Coal Tar) Spray Applied	$25.17		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$36.67	$49.26
Steeplejack Work	$24.62		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$36.12	$48.43
Elevated Tanks	$27.31		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$38.81	$52.46
Water Blasting	$24.42		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$35.92	$48.13
Apprentice	**Percent**											
30 Day	50.00	$11.84	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$18.14	$24.05

Probationary												
1st Year	55.00	$13.02	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$19.32	$25.83
2nd Year	65.00	$15.39	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$21.69	$29.38
3rd Year	75.00	$17.75	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$24.05	$32.93
4th Year	85.00	$20.12	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$26.42	$36.48

Special Calculation Note :

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

CLARK, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE

Special Jurisdictional Note :

Details :

Industrial work but not limited to:work done on industrial plants, repair garages, processing plants,storage tanks, warehouses, skeleton structures,bridges,whether new or old construction, office buildings in industrial sites and interior of shopping malls.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Painter Local 249

Change # : LCN01-2019fbLoc249

Craft : Drywall Finisher **Effective Date :** 05/01/2019 **Last Posted :** 04/17/2019

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Painter Drywall Finisher	$23.67		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$35.17	$47.01
Apprentice	**Percent**											
30 Day Probationary	50.00	$11.84	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$18.14	$24.05
1st Year	55.00	$13.02	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$19.32	$25.83
2nd Year	65.00	$15.39	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$21.69	$29.38
3rd Year	75.00	$17.75	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$24.05	$32.93
4th Year	85.00	$20.12	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$26.42	$36.48

Special Calculation Note :

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

CLARK, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE

Special Jurisdictional Note :

Details :

Industrial work but not limited to:work done on industrial plants, repair garages, processing plants,storage tanks, warehouses, skeleton structures,bridges,whether new or old construction, office buildings in industrial sites and interior of shopping malls.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Painter Local 249 HevHwy

Change # : LCN01-2019fbLoc249

Craft : Painter **Effective Date :** 05/01/2019 **Last Posted :** 04/17/2019

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Painter Bridge Class 1	$35.38		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$46.88	$64.57
Bridge Painter, Rigger, Containment Builder, Spot Blaster Class 2	$32.38		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$43.88	$60.07
Equipment Operator/Field Mechanic, Grit Reclamation, Paint Mixer, Traffic Control, Boat Person, Driver Class 3	$30.38		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$41.88	$57.07
Concrete Sealing, Concrete Blasting/Power Washing/Etc. Class 4	$28.38		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$39.88	$54.07
Quality Control/Quality Assurance, Trafiic safety, Competent Person Class 5	$28.38		$5.57	$5.65	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$39.88	$54.07
Apprentice	**Percent**											
30 day Probationary	50.00	$17.69	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$23.99	$32.84

1st Year	55.00	$19.46	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$25.76	$35.49
2nd Year	65.00	$23.00	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$29.30	$40.80
3rd Year	75.00	$26.54	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$32.84	$46.10
4th Year	85.00	$30.07	$5.57	$0.45	$0.28	$0.00	$0.00	$0.00	$0.00	$0.00	$36.37	$51.41

Special Calculation Note :

Ratio :

1 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

CLARK, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE

Special Jurisdictional Note :

Details :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Painter Local 639

Change # : LCNO1-2015fbLoc639

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

	BHR	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
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.

Prevailing Wage Rate
Skilled Crafts

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	Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
		H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification											
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	$20.98	$1.33	$0.14	$0.00	$0.00	$0.00	$0.56	$0.00	$0.00	$23.01	$33.50

Class A											
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.

Ratio :

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.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Plasterer Local 132 (Dayton)

Change # : LCN01-2020fbLoc132

Craft : Plaster **Effective Date :** 07/30/2020 **Last Posted :** 07/30/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Plasterer	$24.00		$7.40	$7.15	$0.70	$0.00	$2.70	$0.00	$0.00	$0.00	$41.95	$53.95
Apprentice	**Percent**											
1st 6 months	60.00	$14.40	$7.40	$7.15	$0.70	$0.00	$2.70	$0.00	$0.00	$0.00	$32.35	$39.55
2nd 6 months	65.00	$15.60	$7.40	$7.15	$0.70	$0.00	$2.70	$0.00	$0.00	$0.00	$33.55	$41.35
3rd 6 months	70.00	$16.80	$7.40	$7.15	$0.70	$0.00	$2.70	$0.00	$0.00	$0.00	$34.75	$43.15
4th 6 months	75.00	$18.00	$7.40	$7.15	$0.70	$0.00	$2.70	$0.00	$0.00	$0.00	$35.95	$44.95
5th 6 months	80.00	$19.20	$7.40	$7.15	$0.70	$0.00	$2.70	$0.00	$0.00	$0.00	$37.15	$46.75
6th 6 months	85.00	$20.40	$7.40	$7.15	$0.70	$0.00	$2.70	$0.00	$0.00	$0.00	$38.35	$48.55
7th 6 months	90.00	$21.60	$7.40	$7.15	$0.70	$0.00	$2.70	$0.00	$0.00	$0.00	$39.55	$50.35
8th 6 months	95.00	$22.80	$7.40	$7.15	$0.70	$0.00	$2.70	$0.00	$0.00	$0.00	$40.75	$52.15

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

Ratio :

3 Journeymen to 1 Apprentice

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, CLINTON, DARKE, GREENE, MIAMI, MONTGOMERY, PREBLE, SHELBY

Special Jurisdictional Note :

Details :

OTHER IS:Industry Fund

Special Jurisdictional Note :

Details :

OTHER IS:Industry Fund

Prevailing Wage Rate
Skilled Crafts

Name of Union: Plumber Pipefitter Local 162

Change # : OCRO1-2020fbLoc162

Craft : Plumber/Pipefitter **Effective Date :** 06/18/2020 **Last Posted :** 06/18/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Plumber Pipefitter	$32.25		$10.40	$10.62	$0.90	$0.00	$3.35	$0.72	$0.00	$0.00	$58.24	$74.36
Apprentice Indentured AFTER 6/1/2002	**Percent**											
1st Year	50.00	$16.12	$10.40	$3.19	$0.90	$0.00	$0.00	$0.72	$0.00	$0.00	$31.33	$39.40
2nd Year	55.00	$17.74	$10.40	$4.25	$0.90	$0.00	$1.34	$0.72	$0.00	$0.00	$35.35	$44.22
3rd Year	60.00	$19.35	$10.40	$6.37	$0.90	$0.00	$2.01	$0.72	$0.00	$0.00	$39.75	$49.42
4th Year	70.00	$22.57	$10.40	$8.50	$0.90	$0.00	$2.68	$0.72	$0.00	$0.00	$45.78	$57.06
5th Year	80.00	$25.80	$10.40	$10.62	$0.90	$0.00	$3.35	$0.72	$0.00	$0.00	$51.79	$64.69

Special Calculation Note : Other is for Training & Promotion Fund.

Ratio :

1 Journeyman to 1 Apprentice
2 - 4 Journeymen to 2 Apprentices
5 - 7 Journeymen to 3 Apprentices
8 - 10 Journeymen to 4 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

CHAMPAIGN, CLARK, CLINTON, DARKE, FAYETTE, GREENE, MIAMI, MONTGOMERY, PREBLE

Special Jurisdictional Note :

Details :

Wage rate covers: all plumbing, pipefitting, heating, refrigeration and air conditioning work.

Prevailing Wage Rate
Skilled Crafts

Name of Union: Roofer Local 75

Change # : LCN01-2020fbLoc75

Craft : Roofer **Effective Date :** 06/04/2020 **Last Posted :** 06/04/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Roofer	$24.38		$8.28	$8.48	$0.66	$0.00	$0.00	$1.30	$0.00	$0.00	$43.10	$55.29
Slate and Tile	$24.60		$8.28	$8.48	$0.66	$0.00	$0.00	$1.30	$0.00	$0.00	$43.32	$55.62
Apprentice	**Percent**											
1st term 1000 hrs	50.00	$12.19	$2.50	$0.50	$0.66	$0.00	$0.00	$1.30	$0.00	$0.00	$17.15	$23.25
2nd term 1000 hrs	55.00	$13.41	$8.28	$1.27	$0.66	$0.00	$0.00	$1.30	$0.00	$0.00	$24.92	$31.62
3rd term 1000 hrs	60.00	$14.63	$8.28	$2.12	$0.66	$0.00	$0.00	$1.30	$0.00	$0.00	$26.99	$34.30
4th term 1000 hrs	70.00	$17.07	$8.28	$2.97	$0.66	$0.00	$0.00	$1.30	$0.00	$0.00	$30.28	$38.81
5th term 1000 hrs	80.00	$19.50	$8.28	$3.82	$0.66	$0.00	$0.00	$1.30	$0.00	$0.00	$33.56	$43.32
Tradesman	79.00	$19.26	$5.00	$1.53	$0.66	$0.00	$0.00	$1.30	$0.00	$0.00	$27.75	$37.38

Special Calculation Note : Other is for National Roofing Industry Pension Plan.

Ratio :

3 Journeymen to 2 Apprentices

Jurisdiction (* denotes special jurisdictional note) :

ALLEN, AUGLAIZE, CLARK, CLINTON, DARKE, GREENE, MERCER, MIAMI, MONTGOMERY, PREBLE, SHELBY, VAN WERT

Special Jurisdictional Note :

Details :

Details :

Prevailing Wage Rate
Skilled Crafts

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		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Sheet Metal Worker	$27.72		$8.52	$14.46	$0.85	$0.00	$0.00	$0.00	$0.00	$0.00	$51.55	$65.41
Apprentice	**Percent**											
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 :

Prevailing Wage Rate
Skilled Crafts

Name of Union: Sprinkler Fitter Local 669

Change # : LCN01-2020fbLoc669

Craft : Sprinkler Fitter **Effective Date :** 04/08/2020 **Last Posted :** 04/08/2020

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Sprinkler Fitter	$40.40		$10.23	$6.80	$0.52	$0.00	$5.12	$0.10	$0.00	$0.00	$63.17	$83.37
Apprentice Indentured after April 1, 2013	**Percent**											
ClLASS 1	45.00	$18.18	$7.75	$0.00	$0.52	$0.00	$0.00	$0.10	$0.00	$0.00	$26.55	$35.64
CLASS 2	50.00	$20.20	$7.75	$0.00	$0.52	$0.00	$0.00	$0.10	$0.00	$0.00	$28.57	$38.67
CLASS 3	54.38	$21.97	$10.23	$6.80	$0.52	$0.00	$1.15	$0.10	$0.00	$0.00	$40.77	$51.75
CLASS 4	59.38	$23.99	$10.23	$6.80	$0.52	$0.00	$1.15	$0.10	$0.00	$0.00	$42.79	$54.78
CLASS 5	64.38	$26.01	$10.23	$6.80	$0.52	$0.00	$1.40	$0.10	$0.00	$0.00	$45.06	$58.06
CLASS 6	69.38	$28.03	$10.23	$6.80	$0.52	$0.00	$1.40	$0.10	$0.00	$0.00	$47.08	$61.09
CLASS 7	74.38	$30.05	$10.23	$6.80	$0.52	$0.00	$1.40	$0.10	$0.00	$0.00	$49.10	$64.12
CLASS 8	79.38	$32.07	$10.23	$6.80	$0.52	$0.00	$1.40	$0.10	$0.00	$0.00	$51.12	$67.15
CLASS 9	84.38	$34.09	$10.23	$6.80	$0.52	$0.00	$1.40	$0.10	$0.00	$0.00	$53.14	$70.18
CLASS 10	89.38	$36.11	$10.23	$6.80	$0.52	$0.00	$1.40	$0.10	$0.00	$0.00	$55.16	$73.21

Special Calculation Note : $0.10 for Other is National Fire Sprinkler Association

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.

Prevailing Wage Rate
Skilled Crafts

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

Change # : OCRO1-2019fbBldgHevHwy

Craft : Truck Driver **Effective Date :** 09/11/2019 **Last Posted :** 09/11/2019

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
Truck Driver CLASS 1 4 wheel service, dump, and batch trucks, Oil Distributor - Asphalt Distributor-Tandems	$28.04		$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$43.14	$57.16
Apprentice	**Percent**											
First 6 months	80.00	$22.43	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$37.53	$48.75
7-12 months	85.00	$23.83	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$38.93	$50.85
13-18 months	90.00	$25.24	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$40.34	$52.95
19-24 months	95.00	$26.64	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$41.74	$55.06
25-30 months	100.00	$28.04	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$43.14	$57.16

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

Ratio : **Jurisdiction (* denotes special**

3 Journeymen to 1 Apprentice	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

jurisdictional note) :

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.

Prevailing Wage Rate
Skilled Crafts

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

Change # : LCRO1-2019-fbBldgHevHwy

Craft : Truck Driver Effective Date : 10/16/2019 Last Posted : 10/16/2019

	BHR		Fringe Benefit Payments						Irrevocable Fund		Total PWR	Overtime Rate
			H&W	Pension	App Tr.	Vac.	Annuity	Other	LECET (*)	MISC (*)		
Classification												
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)	$28.46		$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$43.56	$57.79
Apprentice	**Percent**											
First 6 months	80.00	$22.77	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$37.87	$49.25
7-12 months	85.00	$24.19	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$39.29	$51.39
13-18 months	90.00	$25.61	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$40.71	$53.52
19-24 months	95.00	$27.04	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$42.14	$55.66
25-30 months	100.00	$28.46	$7.00	$7.90	$0.20	$0.00	$0.00	$0.00	$0.00	$0.00	$43.56	$57.79

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

Ratio :

3 Journeymen 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, 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.

ADDENDA TO CONTRACT

All addenda that are posted for this project shall be listed below and filed behind this cover sheet and acknowledged on Section 00 52 00, "Agreement."

ADDENDA:

No. _____, dated _____, 202_

No. _____, dated _____, 202_

No. _____, dated _____, 202_

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