

# **AERATED LAGOON FACILITY IMPROVEMENTS DILLINGHAM, ALASKA**

## **PROJECT MANUAL**

Prepared for

**CITY OF DILLINGHAM**



Prepared by

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**May 2023**

**CITY OF DILLINGHAM, ALASKA  
AERATED LAGOON FACILITY IMPROVEMENTS  
CONTRACT DOCUMENTS  
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## PERMITS

State of Alaska Domestic Wastewater Disposal Systems Approval to Construct  
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Land Clearing Timing Guidance for Alaska

## RECORD DRAWINGS

Under Separate Cover

## CONSTRUCTION DRAWINGS

Under Separate Cover

SECTION 00 11 16  
INVITATION TO BID

Located at: Dillingham, Alaska

The Work consists of the Aerated Lagoon Facility Improvements.

Bid documents can be found at <https://www.dillinghamak.us/rfps>

Sealed Bids will be received at the City Office, P.O. Box 889, Dillingham, Alaska 99576 and then publicly opened and read aloud in the Dillingham City Office.

ALL BIDS ARE DUE PRIOR TO 2:00 p.m., June 13, 2023.

BIDS WILL BE OPENED AT 2:00 p.m., June 13, 2023.

All Bids not received prior to the date and times set forth above will NOT BE ACCEPTED FOR CONSIDERATION. The time clock in the Dillingham City Office is the time of record.

All Bids shall be accompanied by an acceptable bid guaranty in the form of a Bid Bond in an amount of not less than five percent (5%) of the total Bid, as specified in Section 00 21 13, Instructions to Bidders and in accordance with the Bid Bond Form, Section 00 41 13.13. Furthermore, Bidders shall certify compliance with the use of American Iron and Steel Law.

Performance and payment bonds are required and shall be executed on forms furnished by OWNER. Each bond shall be issued in an amount of one hundred percent (100%) of the Contract Amount by a solvent surety company authorized to do business in the State of Alaska and shall meet any other requirements established by law or by OWNER pursuant to applicable law.

Minimum insurance requirements are specified in Section 00 73 00, Supplementary General Conditions. Minimum wage rates have been established and are specified in Section 00 73 43, Wage Rate Requirements and Payroll Reporting and Section 00 73 43A, Alaska Labor Standards, Reporting, and Prevailing Wage Rate Determination Reporting.

Contract Time is of essence and all Work shall be completed within 210 days after the Notice to Proceed, in accordance with the Bid Form, Section 00 41 13. Liquidated damages are \$500.00 per day, in accordance with the Bid Form, Section 00 41 13. A Winter Suspension is anticipated for this project.

OWNER reserves the right to reject any or all Bids and to waive any minor informality in any Bid or solicitation procedure (a minor informality is one that does not affect the competitiveness of the bidders).



A Pre-Bid Conference will be held on June 2, 2023 at 10:00 AM AKST  
(date) (time)  
at the City of Dillingham Office  
141 Main Street  
Dillingham, Alaska.

Prospective Bidders are encouraged to review the project area.

Patty Buholm  
Planning Director

END OF INVITATION TO BID

SECTION 00 21 13

INSTRUCTIONS TO BIDDERS

PROJECT NAME: Aerated Lagoon Facility Improvements  
ADDRESS: Dillingham, Alaska  
PROJECT NUMBER(S): ITB 2023-01  
DATE: May 22, 2023  
CITY CONTACT: Patty Buholm, Planning Director Phone: 907-842-3785  
ENGINEER/ARCHITECT: CRW Engineering Group, Inc. Phone: 907-562-3252

The City of Dillingham, hereafter called Owner, is requesting sealed written Bids for furnishing all labor, materials, equipment, supervision and performing all Work required for the above referenced Project. Following are the Solicitation Instructions. Bidder is cautioned to refer to the other Bid Documents for further details.

1. EQUAL OPPORTUNITY

- A. Equal Employment Opportunity: No Bidder, or Bidder's agent shall engage in any discriminatory employment practice as defined in Equal Opportunity Clause and the Standard Federal Equal Employment Opportunity Construction Contract Specifications set forth in the Supplemental General Conditions.
- B. Americans With Disabilities Act (ADA) Compliance: No Bidder, or Bidder's agent shall engage in any discriminatory employment practice against individuals with disabilities as defined in the ADA.

2. SOLICITATION

- A. Review of Documents: Bidders are expected to examine all documents that make up the Solicitation. Bidders shall promptly notify the City of any omission, ambiguity, inconsistency or error that they may discover upon examination of the Solicitation. Bidders must use a complete Solicitation to prepare Bids. The City assumes no responsibility for any errors or misrepresentations that result from the use of incomplete Solicitations.
- B. Location of Documents: Solicitations are issued by the City. The location and phone number for the City Office are specified in the advertisement and in the Solicitation.

3. EXPLANATIONS OR CLARIFICATIONS

Any explanation, clarification, or interpretation desired by a Bidder regarding any part of the Solicitation must be requested in writing from the City Office with sufficient time allowed for a written addendum to reach each Bidder before the submission of their Bid. Interpretations, corrections, or changes to the Solicitation made in any other manner are not binding upon the City, and Bidders shall not rely upon such interpretations, corrections or changes. Oral explanations or instructions given before the award of the Contract are not binding. Requests for explanations or clarifications may be faxed to the City Office at (907) 842-2060. The fax must clearly identify the Purchasing Officer's name and project number. Any material information given to one Bidder concerning a Solicitation will be furnished as an Addendum to all Bidders who have been issued a Solicitation.

4. PRE-BID CONFERENCE

The pre-bid conference time and place is specified in Section 00 11 16 – Invitation to Bid.

5. PREPARATION OF BIDS

Each Bidder must furnish the information required by the Solicitation on the documents provided. Bids submitted on other than the forms included in the Solicitation shall be considered non-responsive. Any attempt to alter the wording in the Solicitation is ineffective and will result in rejection of the Bid.

- A. Taxes: Purchases of Goods or Services for City use are usually exempt from City, State, and most Federal Taxes. Bids may not include exempted taxes. The successful Bidder should request a Tax Exemption Certificate from the City Office. Under no circumstances shall the City be liable to pay exempt taxes under any Contract.
- B. Brand Name or Equal: If the Solicitation indicates brand name or “equal” products are acceptable, the Bidder may Bid an “equal” product but must be prepared to demonstrate those features that render it equal. Final determination of a product as an “equal” remains with the City.
- C. Delivery Time: Delivery time, if stated as a number of days, will be based on calendar days. Time is of the essence in any City Procurement. If the indicated date cannot be met or the date is not indicated, the Bidder shall state its best delivery time.
- D. Free on Board (FOB) Point: The Bidder should quote its lowest and best price, with the goods delivered to the place specified, at the Bidder’s expense and risk, and their tender delivery to the City.
- E. Prices: Bids shall be firm unless otherwise specified. Pricing shall be entered on the Bid Sheet in ink. Totals shall be entered in the “Total Price” column of the Bid Sheet. In the event of a discrepancy between unit price and extended price, the unit price shall govern.
- E. Signature: The Bidder must sign each document in the Solicitation requiring a signature. Any change made to the Bid must be initialed by the Bidder.
- G. Bid Guaranty: When required by the Solicitation, a Bid must be accompanied by a Bid bond with Power of Attorney attached, issued by a solvent surety authorized under laws of the State of Alaska and acceptable to the City.
- H. Alternate Bids: Alternate Bids will be rejected unless the Solicitation authorizes the submission of Alternates.
- I. Exceptions: Be advised that exceptions to any portion of the Solicitation may jeopardize acceptance of the bid.
- J. Proprietary Information:
  - i. All material submitted to the City becomes public property and is subject to the Alaska Open Records Law upon receipt.
  - ii. If a Bidder does not desire proprietary information in the bid to be disclosed, each page must be identified and marked proprietary at time of submittal. The City will, to the

extent allowed by law, endeavor to protect such information from disclosure. The final decision as to what information must be disclosed, however, lies with the Alaska Attorney General.

- iii. Failure to identify proprietary information will result in all unmarked sections being deemed non-proprietary and available upon public request.

- K. Bid Preparation Costs: All costs associated with preparing a Bid in response to a Solicitation shall be borne by the Bidder.

## 6. BIDDER'S QUALIFICATIONS

The Bidder shall be experienced with construction of municipal wastewater systems. Bidder shall have worked on 2 municipal wastewater projects in the last 5 years.

The Bidder is to include a statement of facts, in detail, as to his previous experience in performing comparable work, his business and technical organization, as outlined in the Statement of Qualifications, required with the Bid. The purpose of this information is to help establish that the bidder and their subcontractors are responsible and qualified to perform the work.

## 7. SUBMISSION OF BIDS

Unless otherwise specified, Bidders are required to submit an executed original and four (4) copies of the Bid,

- A. Documents Required with Bid: The following documents must be submitted with each Bid prior to the Due Date:
  - i. the signed Bid Form;
  - ii. acknowledgement of receipt of Addenda issued in spaces provided in Bid Form;
  - iii. required Bid Bond;
  - iv. copy of Articles of Partnership or Incorporation and resolution, or corporate board minutes empowering signatory to bind bidder, attested by an officer of bidder;
  - v. the signed Statement of Qualifications;
  - vi. Certification by Bidder of Compliance with the Use of American Iron and Steel Law
  - vii. Equal Employment Opportunity Statement of Acknowledgement;
  - vi. any other document included in the Solicitation requiring completion or execution by the Bidder; and
  - vii. any additional document required by the Solicitation.

All other pages in the Solicitation should be retained by the Bidder.

- B. Mailing: Bids and Compliance Plans (when required by the solicitation), must be returned in a sealed envelope or container marked on the outside with the:

Bidder's name & address  
Project number  
Due date and time.

- i. When sending a Bid, use the proper address for the type of service desired, as shown below.

P.O. Address for US Mail	Street Address for Hand Delivery or Courier Service
City of Dillingham	City of Dillingham
P.O. Box 889	City Office, 141 Main Street
Dillingham, Alaska 99576	Dillingham, Alaska 99576
	Phone: (907) 842-5148

Note: Bids that are not submitted in a sealed envelope or container will not be considered.

- ii. Telegraphic or facsimile Bids will not be accepted.

C. Addendum: Receipt of all Addendums must be acknowledged on the Bid Form.

D. Late Bids: Bids must be received in the City Office prior to the Due Date. All Bids received after the Due Date are considered late and will be returned to the Bidder unopened. The time stamp clock in the City Clerk’s Office is the time of record. It is the sole responsibility of the Bidder to ensure timely delivery of the Bid. The City will not be responsible for failure of service on the part of the U.S. Postal Office, courier companies, or any other form of delivery service chosen by the Bidder.

## 8. MODIFICATION OR WITHDRAWAL OF BIDS

A. Modification of Bids: Bids may be modified in writing at any time prior to the Due Date.

B. Withdrawal of Bids: Bids may be withdrawn in writing, telegraphically, or by facsimile (provided that the facsimile is signed by the Bidder) at any time prior to the Due Date. A Bid may also be withdrawn in person by a Bidder, provided the withdrawal is made prior to the Due Date. A receipt of withdrawal must be signed by the Bidder. No Bids may be withdrawn after the Due Date without forfeiture of the Bid guarantee unless there is a material error in the Bid. Withdrawn Bids may be resubmitted, with or without modifications, up to the Due Date.

## 9. PROOF OF INSURANCE AND LICENSING

A. Responding bidders will be required to provide the following prior to a “Notice of Intent to Award”:

- i. Copy of City of Dillingham Business License [Not required if annual sales are less than \$10,000, if the business is not operating in Dillingham regularly or will not occur over a period of time, or a one-time sale.]
- ii. State of Alaska Business License [Per AS 43.70 any individual, partnership, or company which engages in business activity in Alaska must have a business license. “Business” means a for profit or nonprofit entity engaging or offering to engage in a trade, a service, a profession, or an activity with the goal of receiving a financial benefit in exchange for the provision of services, or goods, or other property.]
- iii. Certification of Insurance and Workers Compensation as required under AS23.30 naming all employees [Not required for sole proprietors with no employees.]
- iv. Proof of commercial insurance, covering bodily injury, death, and property damage with a single limit not less than one million (\$1,000,000) dollars. [Not required for

purchases of supplies, materials, and equipment unless over \$20,000.]

- v. Vehicle liability insurance including applicable uninsured/underinsured coverage with limits of liability not less than one million (\$1,000,000) dollars per occurrence combined single limit bodily injury and property damage. [Not required for purchase agreements for supplies, materials or equipment.]

- B. All insurances, workers' compensation insurance, commercial general liability insurance and motor vehicle liability insurance, as described above shall include an endorsement stating the following: sixty (60) days advance written notice of cancellation, non-renewal, reduction change, shall be sent to the Planning Director, P.O. Box 889, Dillingham, AK 99576.

## 10. OPENING OF BIDS

The City Clerk will be responsible for opening Bids and will confirm the time and announce the Bid opening. The City Clerk will then personally and publicly open all Bids timely received, reading each Bid aloud.

## 11. EVALUATION FACTORS AND AWARD

- A. Evaluation: Bidders may furnish pricing for all or any portion of the Solicitation (unless otherwise specified). However, the City may evaluate and award the Contract for any item or group of items shown on the Solicitation, or any combination deemed most advantageous to the City. Bids that specify an "all or none" award may be considered if a single award is advantageous. A Bid containing prices significantly lower than all other Bidder's prices for an item will present a rebuttable presumption of irresponsibility.
- B. Award: Bids will be awarded to the lowest responsible Bidder.
- C. Acceptance of Bid: Acceptance of a Bid for a service agreement will be by Contract. Subsequent purchase releases may be issued as appropriate. The contents of a Bid shall become a part of the Contract. Under no circumstances will the City be responsible for Goods or Services provided without an acceptance signed by an Authorized City Representative.
- D. Reservations: The City expressly reserves the right to:
  - i. specify approximate quantities in the Solicitation;
  - ii. extend the Solicitation opening date and time;
  - iii. consider and accept alternate Bids, if specified in the Solicitation, when most advantageous to the City;
  - iv. waive as an informality, minor deviations from specifications provided they do not affect competition or result in functionally unacceptable Goods or Services;
  - v. waive any minor informality in any Bid or Solicitation procedure (a minor informality is one that does not affect the competitiveness of the Bidder);
  - vi. add additional terms or modify existing terms in the Solicitation;
  - vii. reject a Bid containing exceptions, additions, qualifications or conditions not called for in the Solicitation;
  - viii. reject a bid because of unbalanced unit bid prices;
  - ix. reject a Bid received from a Bidder or Principal who is currently debarred or suspended by the City
  - x. reject a Bid received from a Bidder or Principal who is currently debarred or suspended by the Federal Government (Applicable if project receives Federal funding);
  - xi. reject a Bid that contains fraudulent information;

- xii. reject a Bid that has material omissions;
- xiii. reject or cancel any or all Bids;
- xiv. reissue a Solicitation; and/or
- xv. procure any item by other means.

## 12. CONDITIONS OF OFFERING AND ACCEPTANCE

- A. This is a Request for Bid only and is not a guarantee the City of Dillingham will purchase any or all of the products or services indicated in this invitation.
- B. The City of Dillingham reserves the right to reject or accept any and all bids, to waive irregularities or informalities in the procurement process, and to give particular attention to the qualifications of the bidder.
- C. The City reserves the right to revise or clarify the Request for Bid, respond to questions, and/or extend or shorten the due date of process.
- D. The City retains the right to cancel the Request for Bid process if the City determines it is in their best interest. Any cost incurred by bidders for the preparation and submittal of the bid is the sole responsibility of the bidder.
- E. A bid may be corrected or withdrawn by a written request received prior to the deadline for receipt of bids.
- F. All bids and other material submitted become City property and may be returned only at their option.
- G. The City assumes no responsibility or liability for the transmission, delay, or delivery of bids by either public or private carriers.
- H. Any and all media announcements pertaining to this ITB require the City's prior written approval.
- I. The bidder agrees to allow the City at least 60 days from the bid date to enter into a contract with the selected bidder for the price offered by the bidder.
- J. The City intends to award a contract, subject to negotiation of a satisfactory agreement based upon the Agreement, Section 00 52 00 or the City's standard professional services contract form.
- K. Contractor shall in performance of a contract, comply with all applicable federal, state, and local laws, ordinances, orders, rules and regulations applicable to its performance.
- L. Contractor must be in compliance with Dillingham Municipal Code 4.20.240, Tax Delinquent List.

## 13. OPPORTUNITY TO PROTEST

The Purchasing Officer has the authority to settle or resolve any claim of an alleged deficiency or protest. The procedures for notifying the City of Dillingham of an alleged deficiency or filing a protest are listed below. If you fail to comply with any of these requirements, the Purchasing Officer may dismiss your complaint or protest.

- A. **Prior to Bid Opening Date:** If you are a prospective Bidder and you become aware of the facts regarding what you believe is a deficiency in the solicitation process before the Bid is opened, you must notify the City in writing of the alleged deficiency before that date, giving the City an opportunity to resolve the situation prior to the bid opening date.
- B. **Alter Bid Opening Date:** If you submit a Bid to the City and you believe that there has been a deficiency in the solicitation process or the award, you have the opportunity to protest the solicitation process or the recommended award as follows:
- i. You must file written notice of your intent to protest within four (4) calendar days of the date that you know or should have known of the facts relating to the protest. If you do not file a written notice of intent within this time, you have waived all rights to protest the solicitation process or the award,
  - ii. You must file your written protest within fourteen (14) calendar days of the date that you know or should have known of the facts relating to the protest unless you know of the facts before the Bid has been opened. If you know of the facts before those dates, you must notify the City as stated above,
  - iii. You must submit your protest in writing and must include the following information:
    - (1) your name, address, telephone, and fax number;
    - (2) the project number;
    - (3) a detailed statement of the factual grounds for the protest, including copies of any relevant documents.
  - iv. Your protest must be concise and presented logically and factually to help with the City's review.
  - v. When the City receives a timely written protest the Purchasing Officer will determine whether the grounds for your protest are sufficient. If the Purchasing Officer decides that the grounds are sufficient, the Purchasing Office will schedule a protest hearing, usually within five (5) working days. If the Purchasing Officer determines that your grounds are insufficient, the City will notify you of that decision in writing.
  - vi. The protest hearing is informal and is not subject to the Open Meetings Law. The purpose of the hearing is to give you a chance to present your case; it is not an adversarial proceeding. Appropriate City staff or representatives may attend. You may bring a representative or anyone else that will present information to support the factual grounds for your protest with you to the hearing.
  - vii. A decision will usually be made within fifteen (15) calendar days after the hearing.
  - viii. The City will send you a copy of the hearing decision after the appropriate City staff has reviewed the decision.
  - ix. When a protest is filed, the City usually will not make an award until a decision on the protest is made. However, the City will not delay an award if the Planning Director or the Purchasing Officer determines that:
    - (1) the City urgently requires the supplies or services to be purchased, or
    - (2) failure to make an award promptly will unduly delay delivery or performance.

In those instances, the City will notify you and make every effort to resolve your protest before the award.

#### 14. POST BID DOCUMENTS REQUIRED FROM SUCCESSFUL BIDDER

- A. **Letters of Intent:** When a MBE/WBE Compliance Plan is required, the successful Bidder must submit to the Contract Awarding Authority the Letters of Intent to subcontract required by the Compliance Plan within three (3) business days after notification, Failure to submit the required letters will be grounds for rejection of the Bid.



- B. Certificates of Insurance: When insurance is required, the Bidder must provide Certificates of Insurance in the amounts and for the coverages required to the City Office within 14 calendar days after notification of award, or as otherwise required by the Solicitation,
- C. Payment and/or Performance Bonds: When Payment and/or Performance Bonds are required, the Bidder must provide the bonds, in the amounts and on the conditions required, within 14 calendar days after notification of award, or as otherwise required by the Solicitation.

END OF SOLICITATION INSTRUCTIONS

SECTION 00 41 13

BID FORM

Planning Director  
Dillingham, Alaska

The undersigned, in compliance with your invitation for bids for construction of the following Project:  
Aerated Lagoon Facility Improvements

Project No. ITB 2023-01 for the City of Dillingham, Alaska, having examined the Project Manual and Addenda, the sites of the proposed Work and being familiar with all of the conditions surrounding the proposed Project, having conducted all inquiries, tests and investigations deemed necessary and proper; hereby proposes to furnish all labor, permits, material, machinery, tools, supplies and equipment, and perform all Work required for construction of the Project in accordance with the Project Manual and Addenda within the time indicated in the following Bid Schedule. The Owner reserves the right to accept any or all line items in the Bid Schedule prior to Award.

Bid Item No.	Bid Item Description	Unit	Quantity	Unit Bid Price	Total Bid Price
1	Site Mobilization and Demobilization, Site Restoration, Cleanup, and Record Drawings	LS	1		
2	Site Preparation and Construction of Pre-Treatment Pond	LS	1		
3	Installation of Aeration and Baffle Systems	LS	1		

BID TOTAL \$ \_\_\_\_\_

Name of Bidding Firm: \_\_\_\_\_

The undersigned agrees that the period of time for holding bids should be at least 60 calendar days.

ACTIONS ON BIDS: OWNER reserves the right to reject any or all Bids and to waive any minor informality in any Bid or solicitation procedure (a minor informality is one that does not affect the competitiveness of the bidders).

The Contract, if awarded, shall be awarded to the responsible Bidder who submits the lowest responsive Bid. The low Bidder shall be determined by the lowest combination of the basic bid and as many additive alternates as may be selected within the funds available.

TIME OF COMPLETION: The undersigned bidder agrees to commence work after written notice as specified in a written "Notice to Proceed" is issued by the Owner and to finally complete the Work, as required by the Bid Package, Drawings and Addenda for the Work within 210 Calendar Days. The bidder further agrees that should the bidder fail to finally complete the Work within the number of days indicated in the Bid or as subsequently adjusted, bidder shall pay the liquidated damages for each consecutive day thereafter as provided below, unless the Owner elects to pursue any other action allowed by law.

LIQUIDATED DAMAGES: The bidder understands and agrees that the timely completion of the described Work is of the essence. The bidder and the Owner agree that for each and every Calendar Day the Work or any portion thereof, remains incomplete after the Final completion date as established by the first sentence of the above paragraph, "Time of Completion", the bidder shall pay the amount of five hundred dollars (\$500.00) per Calendar Day as liquidated damages, not as a penalty, but for delay damages to the Owner. Such amount shall be deducted by the Owner from any payment due to the bidder. In the event of a default or breach by the Contractor and demand is made upon the surety to complete the project, in accordance with the Contract Documents, the surety shall be liable for liquidated damages pursuant to the Contract Documents in the same manner as the Contractor would have been.

The undersigned acknowledges receipt of the following addenda:

Addendum No. 1 dated _____	Received _____
Addendum No. 2 dated _____	Received _____
Addendum No. 3 dated _____	Received _____
Addendum No. 4 dated _____	Received _____
Addendum No. 5 dated _____	Received _____
Addendum No. 6 dated _____	Received _____

\_\_\_\_\_  
Secretary, \*if bidder is a Corporation

\_\_\_\_\_  
Bidder

(Seal)

\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

\* Copy of Corporate Resolution and minutes with certificate of officer of bidder as to authority of signatory to bind bidder is to be signed and dated no earlier than one week before Bid date and attached to this document.

\_\_\_\_\_  
Address

\_\_\_\_\_  
Telephone Number

\_\_\_\_\_  
FAX Number

END OF BID FORM

SECTION 00 41 13.13

BID BOND

Know All Men By These Presents: That \_\_\_\_\_ as Principal, and \_\_\_\_\_, as Surety, are held and firmly bound unto \_\_\_\_\_ (Owner), in the penal sum of \_\_\_\_\_ U.S. Dollars (\$ \_\_\_\_\_ U.S.) (not less than five percent of the total amount of the Bid) for the payment of which sum, well and truly made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

Whereas, said Principal has submitted a Bid to said Owner to perform Work required under the Bid Schedule of the Owner’s Contract Documents entitled

Aerated Lagoon Facility Improvements

Now Therefore, if the Bid is rejected or if said Principal is awarded a contract by said Owner and, within the time and in the manner required in the “Invitation for Bids” and the “Solicitation Instructions” enters into a written Agreement on the form of Agreement bound with said Contract Documents, furnishes the required certificates of insurance, and furnishes the required Performance Bond and Payment Bond, then this obligation shall be null and void, otherwise it 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. In the event suit is brought upon this bond by said Owner and Owner prevails, said Surety shall pay all costs incurred by said Owner in such suit, including a reasonable attorney’s fee to be fixed by the court.

The Surety, for the value received, hereby stipulates and agrees that the obligation of said Surety and its Bond shall be in no way impaired or affected by any extension or the time within which the Owner may accept such Bid; and said Surety does hereby waive notice of any such extension.

In witness whereof, said Principal and Surety have signed and sealed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_.

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

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

By \_\_\_\_\_

By \_\_\_\_\_

Note: Bond shall be issued by a solvent Surety company authorized to do business in Alaska. Surety company must appear on the Treasury Department’s most current list (circular 570 as amended).

END OF BID BOND

SECTION 00 42 00

STATEMENT OF QUALIFICATIONS

This form will be the basis of establishing the qualifications of the Construction Team for undertaking a construction project for the City of Dillingham.

This questionnaire forms part of the bid and failure to submit is a basis of rejection of the bid.

All information requested herein must be provided completely. The Bidder is advised that the Owner or its representative may contact any and all references listed herein. If additional space is needed to respond to any inquiry, please attach separate pages.

1. GENERAL

a. Bidder's Information

Bidders Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip Code: \_\_\_\_\_

Telephone No.: ( ) \_\_\_\_\_ Facsimile No.: \_\_\_\_\_

b. Bidder's Representative Information

Contact Person(s) Information:

Primary: \_\_\_\_\_ Telephone No.: ( ) \_\_\_\_\_

Secondary: \_\_\_\_\_ Telephone No.: ( ) \_\_\_\_\_

- c. Organization Status (Check One): \_\_\_\_\_ Corporation  
\_\_\_\_\_ Partnership  
\_\_\_\_\_ LLC  
\_\_\_\_\_ Individual

d. If Organization is a Corporation or Limited Liability Company, answer the following:

Date of Incorporation or organization: \_\_\_\_\_

State in which incorporated or formed: \_\_\_\_\_

Principal Officers and Manager if an LLC managed by a manager:

Name	Title	Date Assumed	Position
_____	_____	_____	_____
_____	_____	_____	_____

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e. If Organization is a Partnership, answer the following:

Date of Organization: \_\_\_\_\_

Type of Partnership: \_\_\_\_\_

Name and Address of all partners:

Name

Address

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## 2. FINANCIAL

a. Have you ever failed to complete a contract due to insufficient resources?

Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, explain:

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b. Describe any arrangements you have made to finance this work:

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## 3. EQUIPMENT

a. Do you have adequate equipment available to perform this work?

Yes \_\_\_\_\_ No \_\_\_\_\_ If no, explain:

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b. Do you propose to purchase any equipment for use on the project?

Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, describe type, quantity, and approximate cost:

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c. Do you propose to rent any equipment for this work?

Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, describe type and quantity:

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d. Is your bid based on firm quotes for all materials necessary for this project?

Yes \_\_\_\_\_ No \_\_\_\_\_

e. Do you propose to subcontract any of the work contained in this project?

Yes \_\_\_\_\_ No \_\_\_\_\_ If yes, describe:

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4. EXPERIENCE

a. List major construction projects your organization has completed in the past 5 years:

Project Name	Owner	A/E	Contract Amount	Date Awarded	Date Completed

b. Have you been regularly engaged in the construction of municipal wastewater projects for the last 5 years?

Yes \_\_\_\_\_ No \_\_\_\_\_

c. Have you worked on municipal wastewater lagoons in the last 5 years?

Yes \_\_\_\_\_ No \_\_\_\_\_

d. Have you worked on any projects requiring installation of sewer mains in the last 5 years?

Yes \_\_\_\_\_ No \_\_\_\_\_

e. Project references and performance information:

List and provide company Project References and performance information for at least 2 municipal wastewater construction projects. List the project references below and provide additional information by completing a Project Reference Form at the end of this Section.

Project Name and Location	Owner	A/E	Contract Amount	Date Completed
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

5. SUBCONTRACTOR/MATERIAL SUPPLIERS

List all Subcontractors and major material suppliers below:

Name/Address	Subcontractor/Material Supplier	Date Completed
1. _____	_____	_____
2. _____	_____	_____
3. _____	_____	_____
4. _____	_____	_____
5. _____	_____	_____

6. VALIDATION

The undersigned certifies that the information provided in this Section is correct and accurate.

Signature: \_\_\_\_\_

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

Title: \_\_\_\_\_

Name of Contractor: \_\_\_\_\_



**SIMILAR MUNICIPAL WASTEWATER PROJECT REFERENCE FORM**

(complete for at least 2 projects)

Project Name and Location: \_\_\_\_\_

Bid Amount: \_\_\_\_\_

Final Contract Amount: \_\_\_\_\_ Year Completed: \_\_\_\_\_

Contract Completion Time: \_\_\_\_\_ Days

Dollar Amount and Number of Change Orders: \_\_\_\_\_

Actual Completion Time: \_\_\_\_\_ Days

**Description of Work:**

General Overview: \_\_\_\_\_

New Facility or Retrofit/ Expansion? \_\_\_\_\_

Project Size (e.g. lagoon size, length of pipe, pump size): \_\_\_\_\_

Other Information? (attach as needed) \_\_\_\_\_

**Names Key Contractor Personnel:**

Project Manager: \_\_\_\_\_

Project Engineer: \_\_\_\_\_

Superintendent: \_\_\_\_\_

Are all of these persons still employed by your organization? \_\_\_\_\_

If no, name those employee(s) not currently employed \_\_\_\_\_

Name and phone number of currently employed individual at your organization who is familiar with this Project. \_\_\_\_\_

Name, Address, and Telephone Number of Owner (including name and telephone number of contact person):

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

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Name, Address, and Telephone Number of Engineer (including name and telephone number of contact person):

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Name, Address, and Telephone Number of Construction Manager employed by Owner

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Amount and number of claims resulting in arbitration or litigation:

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Amount of Settlement: \_\_\_\_\_

Further Information of Claims: \_\_\_\_\_

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**[REPEAT FOR OTHER PROJECTS]**

END OF STATEMENT OF QUALIFICATIONS



**STATE OF ALASKA  
DEPARTMENT OF ENVIRONMENTAL CONSERVATION**

**EQUAL EMPLOYMENT OPPORTUNITY  
STATEMENT OF ACKNOWLEDGEMENT**

This statement of acknowledgement is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7(b)(1)) and must be completed by each Bidder and proposed Subcontractor participating in this contract.

**PLEASE CHECK THE APPROPRIATE BOXES**

THE  Bidder  proposed Subcontractor **hereby CERTIFIES:**

**PART A.** Bidders and proposed subcontractors with 50 or more employees and a federal contract amounting to \$50,000 or more are required to submit one federal EEO-1 report during each year the two conditions (50 employees and a \$50,000 federal contract) exist.

The company named below (Part C) is exempt from the requirements of submitting an EEO-1 report this year.

NO (go to PART B)  YES (go to PART C)

**PART B.** The company named below (Part C) has submitted an EEO-1 report this year, or intends to at this time.

NO  YES

NOTE: On-line EEO-1 report filing may be accessed at the following web address:

<https://egov.eeoc.gov/eeo1/eeo1.jsp>

EEO-1 reporting and instructions may be obtained by writing or e-mail to:

EEO-1 Joint Reporting Committee  
P.O. Box 78040  
Washington, DC 20013-8040  
Telephone 1-866-286-6440  
Email: [e1.techassistance@eeoc.gov](mailto:e1.techassistance@eeoc.gov)

**PART C.**

\_\_\_\_\_  
Signature of Authorized Representative of Company

\_\_\_\_\_  
Date

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

(\_\_\_\_\_) \_\_\_\_\_  
Telephone No.

\_\_\_\_\_  
Address of Company

\_\_\_\_\_  
Zip Code

\_\_\_\_\_  
Project Name

\_\_\_\_\_  
Contract Number

SECTION 00 52 00

AGREEMENT

STATE OF ALASKA

This Agreement is made and entered into this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ by and between the City of Dillingham, Alaska, a municipal corporation, organized and existing under laws of State of Alaska, acting through its Planning Director or other duly authorized designee, hereinafter termed Owner, and \_\_\_\_\_, of the City of \_\_\_\_\_, and State of \_\_\_\_\_, hereinafter termed Contractor.

That for and in consideration of payments and agreements as set forth herein between the Owner and Contractor hereby agrees to commence and complete the following Project:

Aerated Lagoon Facility Improvements

and all Work in accordance with the Project Manual and Addenda, as prepared by and approved by Owner in the total amount of:

\$ \_\_\_\_\_  
(Figure) (Words)

Contractor hereby agrees to commence Work on the date contained in Notice to Proceed given to Contractor, and to finally complete same within \_\_\_\_ Calendar Days after date of written Notice to Proceed.

Waiver of any breach of this Contract shall not constitute waiver of any subsequent breach.

Owner agrees to pay Contractor from available funds for performance of the Contract in accordance with the bid submitted therefore, subject to additions and deductions, as provided in the General Conditions of Agreement, and to make payments on account thereof as provided therein. The Owner's obligation is payable only and solely from funds available for the purposes of this Agreement.

Although drawn by Owner, this Agreement, in event of any disputes over its meaning or application, shall be interpreted fairly and reasonably, and neither more strongly for nor against either party.

OWNER City of Dillingham CONTRACTOR \_\_\_\_\_

By: \_\_\_\_\_ By: \_\_\_\_\_

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

\_\_\_\_\_  
Title of Signatory Printed Name of Signatory

\_\_\_\_\_  
Title of Signatory

APPROVED AS TO FORM:

ATTEST:

By: \_\_\_\_\_  
Law Department

\_\_\_\_\_  
\*Secretary, if Contractor is a Corporation or otherwise registered with Secretary of State

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

\* Copy of Corporate Resolution and minutes with certificate of officer of Contractor as to authority of signatory to bind Contractor is to be signed, dated no earlier than one week before the date of award of Contract, and attached to this document.

END OF AGREEMENT

SECTION 00 61 13.13

PERFORMANCE BOND FORM

KNOW ALL MEN BY THESE PRESENTS: that

\_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_  
(Address of Contractor)

a \_\_\_\_\_, hereinafter called Principal,  
(Corporation, Partnership, or Individual)

and \_\_\_\_\_  
(Name of Surety)

\_\_\_\_\_  
(Address of Surety)

hereinafter called Surety, are held and firmly bound unto the City of Dillingham, PO Box 889, Dillingham, AK 99576 hereinafter called Owner, in the penal sum of \_\_\_\_\_ U.S. Dollars, (\$ \_\_\_\_\_ U.S.) in lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the Principal entered into a certain contract with the Owner, dated the \_\_\_\_ day of \_\_\_\_\_, 2023, a copy of which is hereto attached and made a part hereof for the Aerated Lagoon Facility Improvements.

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

PROVIDED, FURTHER, that the said Surety, for value received hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the contract or to the work or to the specifications.

PROVIDED, FURTHER, that no final settlement between the Owner and the Contractor shall abridge the

right of any beneficiary hereunder, whose claim may be unsatisfied.

IN WITNESS WHEREOF, this instrument is executed in six (6) counterparts, each one of which shall be deemed an original, this \_\_\_\_ day of \_\_\_\_\_, 2023.

ATTEST:

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

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

(Seal)

By \_\_\_\_\_

\_\_\_\_\_  
(Witness as to Principal)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Address)

ATTEST:

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

(Seal)

\_\_\_\_\_  
Surety

By \_\_\_\_\_  
(Attorney in Fact)

\_\_\_\_\_  
(Witness as to Surety)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(Address)

NOTE: Date of Bond must not be prior to date of Contract. If Contractor is Partnership, all partners should execute bond.

END OF PERFORMANCE BOND FORM



SECTION 00 61 13.16

PAYMENT BOND FORM

STATE OF ALASKA

Bond No. \_\_\_\_\_

Project Name \_\_\_\_\_

Know All Men By These Presents: That \_\_\_\_\_ of the City of \_\_\_\_\_, and State of \_\_\_\_\_, as principal, and \_\_\_\_\_ a solvent corporation authorized under laws of the State of Alaska to act as surety on bonds for principals, are held and firmly bound unto \_\_\_\_\_ (Owner), and all Subcontractors, workers, laborers, mechanics and suppliers as their interests may appear, all of whom shall have right to sue upon this bond in the penal sum of \_\_\_\_\_ U.S. Dollars (\$\_\_\_\_\_ U.S.), for payment whereof, well and truly to be made, said Principal and Surety bind themselves and their heirs, administrators, executors, successors and assigns, jointly and severally, by these presents:

Conditions of this Bond are such that, whereas, Principal has entered into a certain written contract with Owner; dated the \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ to which Agreement is hereby referred to and made a part hereof as fully and to the same extent as if copied in length herein.

Now, therefore, condition of this obligation is such, that if the said Principal shall well and truly pay all Subcontractors, workers, laborers, mechanics, and suppliers, all monies to them owing by said Principals for subcontracts, work, labor, equipment, supplies and materials done and furnished for the construction of improvement of said Agreement, then this obligation shall be and become null and void; otherwise to remain in full force and effect.

Provided, however, that this bond is executed pursuant to the State of Alaska statutes and all liabilities on bond shall be determined in accordance with provisions of said Article to same extent as if it were copied at length herein.

Surety, for value received, stipulates and agrees that no change in Contract Time or Contract Amount shall in anywise affect its obligation on this bond, and it does hereby waive notice of any such change in Contract Time or Contract Amount.

In witness whereof, said Principal and Surety have signed and sealed this instrument this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
Principal  
By \_\_\_\_\_  
Title \_\_\_\_\_  
\_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
Surety  
By \_\_\_\_\_  
Title \_\_\_\_\_  
\_\_\_\_\_  
Address \_\_\_\_\_

Telephone \_\_\_\_\_ Fax \_\_\_\_\_  
E-Mail Address \_\_\_\_\_

Name and address of the Resident Agent of Surety:

\_\_\_\_\_

Note: Bond shall be issued by a solvent Surety company authorized to do business in Alaska, and shall meet any other requirements established by law or by Owner pursuant to applicable law. A copy of surety agent's "Power of Attorney" must be attached hereto.

END OF PAYMENT BOND FORM

SECTION 00 62 16

CERTIFICATE OF INSURANCE FORM

The insurance evidenced by this Certificate shall conform to the Invitation for Bids:

Name and Address of Agency:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Phone: \_\_\_\_\_

City of Dillingham Reference:  
 Project Name: \_\_\_\_\_  
 \_\_\_\_\_  
 Project Location: \_\_\_\_\_

Name and Address of Insured:  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Phone: \_\_\_\_\_

Managing Dept.: \_\_\_\_\_  
 Contract No.: \_\_\_\_\_  
 Project Mgr.: \_\_\_\_\_

Prime or Sub-Contractor?: \_\_\_\_\_

Companies Affording Coverages:  
 Company A  
 Letter \_\_\_\_\_  
 Company B  
 Letter \_\_\_\_\_  
 Company C  
 Letter \_\_\_\_\_  
 Company D  
 Letter \_\_\_\_\_

Name of Prime Contractor, if different from Insured:  
 \_\_\_\_\_

Certificate of Insurance

<i>Co. Letter</i>	<i>Type of Insurance</i>	<i>Policy Number</i>	<i>Policy Effective Date (m/d/y)</i>	<i>Policy Expiration Date (m/d/y)</i>	<i>Limits of Liability in Thousands (000) each</i>
	<b>Commercial General Liability Policy</b>				
	___ Blanket Contractual Liability				General Aggregate \$ _____
	___ Completed Operations/ Products				Completed Operations/ Products – Aggregate \$ _____
	___ Explosion, Collapse, Underground				Personal & Advertising Injury \$ _____
	___ Independent Contractor’s Coverage				Each Occurrence \$ _____
	___ Aggregate Limits Per Project				

Certificate of Insurance (Continued)

<i>Co. Letter</i>	<i>Type of Insurance</i>	<i>Policy Number</i>	<i>Policy Effective Date (m/d/y)</i>	<i>Policy Expiration Date (m/d/y)</i>	<i>Limits of Liability in Thousands (000) each</i>
	___ Additional Insured				
	___ 30 Day Notice of Cancellation				Deductible \$ _____
	___ Waiver of Subrogation				
	<b>Auto Liability Policy</b>				CSL \$ _____
	___ Any Auto				Bodily Injury (Per Person) \$ _____
	___ All Owned Autos				
	___ Non-Owned Autos				
	___ Waiver of Subrogation				
	___ 30 Day Notice of Cancellation				Property Damage (Per Accident) \$ _____
	___ Additional Insured				
	___ MCS 90				Deductible \$ _____
	<b>Worker's Compensation and Employers' Liability</b>				Statutory
					(Each Accident) \$ _____
	___ Waiver of Subrogation				(Disease – Policy Limit) \$ _____
					(Disease – Each Employee) \$ _____
	___ Excess Liability Follow form				
	___ Builder's Risk or Installation				

Certificate of Insurance (Continued)

<i>Co. Letter</i>	<i>Type of Insurance</i>	<i>Policy Number</i>	<i>Policy Effective Date (m/d/y)</i>	<i>Policy Expiration Date (m/d/y)</i>	<i>Limits of Liability in Thousands (000) each</i>
	<b>Professional Liability</b>				
	____ 30 Day Notice of Cancellation				Each Claim \$ _____
	Retro-Active Date:				Deductible \$ _____

This is to certify that policies of insurance listed above have been issued to insured named above and are in force at this time. Notwithstanding any requirements, term or condition of any contract or other document with respect to which this certificate may be issued or may pertain, insurance afforded by policies described herein is subject to all terms, exclusions and conditions of such policies.

**CERTIFICATE HOLDER:**

City of Dillingham  
P.O. Box 889  
Dillingham, Alaska 99576

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

\_\_\_\_\_  
AUTHORIZED REPRESENTATIVE

END OF CERTIFICATE OF INSURANCE FORM



**STATE OF ALASKA**  
**MUNICIPAL GRANTS & LOANS**  
**ALASKA CLEAN/DRINKING WATER FUND**  
USE OF AMERICAN IRON AND STEEL

**Sample Step Manufacturer Certification**

*(Documentation must be provided on company letterhead)*

Date

Company Name

Company Address

City, State Zip

Subject:

American Iron and Steel Step Manufacturer Certification for  
Project Name \_\_\_\_\_

I, \_\_\_\_\_ (company representative), certify that the \_\_\_\_\_  
(melting, bending, coating, galvanizing, cutting, etc.) process for \_\_\_\_\_  
(manufacturing or fabricating) the following products and/or materials shipped or provided for  
the project is in full compliance with the American Iron and Steel requirement as mandated in  
EPA's State Revolving Fund Programs.

Item, Products and/or Materials:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_

Such process took place at the following location: \_\_\_\_\_ (address)

If any of the above compliance statements change while providing material to this project we  
will immediately notify the prime contractor and the engineer.

\_\_\_\_\_  
Company representative

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

SECTION 00 72 00

GENERAL CONDITIONS

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## ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

### 1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
  2. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
  3. *Application for Payment*—The form acceptable to Engineer which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
  4. *Bid*—The offer of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
  5. *Bidder*—The individual or entity who submits a Bid directly to Owner.
  6. *Bidding Documents*—The Bidding Requirements and the proposed Contract Documents (including all Addenda).
  7. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders, Bid security of acceptable form, if any, and the Bid Form with any supplements.
  8. *Change Order*—A document recommended by Engineer which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement.
  9. *Claim*—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
  10. *Contract*—The entire and integrated written agreement between the Owner and Contractor concerning the Work. The Contract supersedes prior negotiations, representations, or agreements, whether written or oral.
  11. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
  12. *Contract Price (also Contract Amount)*—The moneys payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement.
  13. *Contract Times (also Contract Time)*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer’s written recommendation of final payment.
  14. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.

15. *Cost of the Work*—See Paragraph 11.01 for definition.
16. *Drawings*—That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
17. *Effective Date of the Agreement*—The date indicated in the Agreement on which it becomes effective, but if no such date is indicated, it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
18. *Engineer*—The individual or entity named as such in the Agreement.
19. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
20. *General Requirements*—Sections of Division 1 of the Specifications.
21. *Hazardous Environmental Condition*—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto.
22. *Hazardous Waste*—The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.
23. *Laws and Regulations; Laws or Regulations*—Any and all applicable laws, rules, regulations, ordinances, codes, and orders of any and all governmental bodies, agencies, authorities, and courts having jurisdiction.
24. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
25. *Milestone*—A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
26. *Notice of Award*—The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
27. *Notice to Proceed*—A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
28. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
29. *PCBs*—Polychlorinated biphenyls.
30. *Petroleum*—Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Waste and crude oils.
31. *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.
32. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
33. *Project Manual*—The bound documentary information or electronic media equivalent prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
34. *Radioactive Material*—Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
35. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.

36. *Samples*—Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
37. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals and the time requirements to support scheduled performance of related construction activities.
38. *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.
39. *Shop Drawings*—All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.
40. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.
41. *Specifications*—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
42. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
43. *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.
44. *Successful Bidder*—The Bidder submitting a responsive Bid to whom Owner makes an award.
45. *Supplementary Conditions*—That part of the Contract Documents which amends or supplements these General Conditions.
46. *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 Subcontractor.
47. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
48. *Unit Price Work*—Work to be paid for on the basis of unit prices.
49. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
50. *Work Change Directive*—A written statement to Contractor issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work Change Directive will not change the Contract Price or the

Contract Times but is evidence that the parties expect that the change ordered or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times.

51. *Owner's Representative*—The person or persons authorized by the Owner to act as the Owner's representative for the purposes of this Contract. Unless and until another or additional designation has been made by Owner by giving written notice to Contractor, Engineer shall be Owner's Representative.

## 1.02 *Terminology*

- A. The words and terms discussed in Paragraph 1.02.B through F 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 Paragraph 9.09 or any other provision of the Contract Documents.

### C. *Day:*

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

### D. *Defective:*

1. The word "defective," when modifying the word "Work," refers to Work that is unsatisfactory, faulty, or deficient in that it:
  - a. does not conform to the Contract Documents; or
  - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
  - c. has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with Paragraph 14.04 or 14.05).

### E. *Furnish, Install, Perform, Provide:*

1. The word "furnish," when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable

- condition.
2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
  3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
  4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.
- F. Unless stated otherwise in the Contract Documents, words or phrases 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. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Insurance:* Before any Work at the Site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with Article 5.

### *2.02 Copies of Documents*

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

### *2.03 Commencement of Contract Times; Notice to Proceed*

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

sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.

2.04 *Starting the Work*

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

2.05 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:
  - 1. a preliminary Progress Schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
  - 2. a preliminary Schedule of Submittals; and
  - 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 *Preconstruction Conference; 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 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, 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 instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.07 *Initial Acceptance of Schedules*

- A. At least 10 days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until acceptable schedules are submitted to Engineer.
  - 1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full



- responsibility therefor.
2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.
  3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

### **ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE**

#### *3.01 Intent*

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

#### *3.02 Reference Standards*

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

#### *3.03 Reporting and Resolving Discrepancies*

- A. *Reporting Discrepancies:*
  1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor discovers, or has actual knowledge of,

and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents, or between the Contract Documents and (a) any applicable Law or Regulation, (b) any standard, specification, manual, or code, or (c) 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 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.
3. Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity, or discrepancy in the Contract Documents unless Contractor had actual knowledge thereof.

B. *Resolving Discrepancies:*

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

3.04 *Amending and Supplementing Contract Documents*

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

3.05 *Reuse of Documents*

- A. Contractor and any Subcontractor or Supplier 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
  2. 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.

- 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.

### 3.06 *Electronic Data*

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

## **ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS; REFERENCE POINTS**

### 4.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's or construction lien against such lands in accordance with applicable Laws and Regulations.
- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

### 4.02 *Subsurface and Physical Conditions*

- A. *Reports and Drawings:* The Supplementary Conditions identify:
  - 1. those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and

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

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the accuracy of the “technical data” contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such “technical data” is identified in the Supplementary Conditions. Except for such reliance on such “technical data,” Contractor may not rely upon or make any claim against Owner or Engineer, or any of their 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.

#### 4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:

1. is of such a nature as to establish that any “technical data” on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
2. is of such a nature as to require a change in the Contract Documents; or
3. differs materially from that shown or indicated in the Contract Documents; or
4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents; then Contractor shall, promptly after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further

disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

B. *Engineer's Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer will promptly review the pertinent condition, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto, and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

C. *Possible Price and Times Adjustments:*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
  - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
  - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
  - b. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the Site and contiguous areas required by the Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or
  - c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, neither Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.

#### 4.04 *Underground Facilities*

A. *Shown or Indicated:* The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the Site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data 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 such information and data;
  - b. locating all Underground Facilities shown or indicated in the Contract Documents;

- c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction; and
- d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated:*

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

4.05 *Reference Points*

- A. The Contractor shall establish reference points for construction, based on the existing wet well location and elevation, 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.

4.06 *Hazardous Environmental Condition at Site*

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner.
- B. Not Used.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to

the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.

- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. 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 4.06.E.
- E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to Contractor: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work; or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.
- F. If after receipt of such written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.
- G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, 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: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.
- H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, 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 created by

Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.

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

## **ARTICLE 5 – BONDS AND INSURANCE**

### *5.01 Performance, Payment, and Other Bonds*

- A. Contractor shall furnish performance and payment bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all of Contractor's obligations under the Contract Documents. The payment bond shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, except as provided otherwise by Laws or Regulations or by the Contract Documents. The performance bond shall remain in effect through the period described by AS 09.10.120. Contractor shall also furnish such other bonds as are required by the Contract Documents.
- B. All bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent 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 each bond.
- C. If the surety on any bond furnished by Contractor is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of Paragraph 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

### *5.02 Licensed Sureties and Insurers*

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

### *5.03 Certificates of Insurance*

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



- B. Owner shall deliver to Contractor, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.
- C. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.
- E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

5.04 *Contractor's Insurance*

- A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
  - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
  - 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
  - 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
  - 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
    - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or
    - b. by any other person for any other reason;
  - 5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
  - 6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.
- B. The policies of insurance required by this Paragraph 5.04 shall:
  - 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, 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;
2. include at least the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;
  3. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
  4. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to Paragraph 5.03 will so provide);
  5. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing, or replacing defective Work in accordance with Paragraph 13.07; and
  6. include completed operations coverage:
    - a. Such insurance shall remain in effect for two years after final payment.
    - b. Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions, to whom a certificate of insurance has been issued, evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter.

#### 5.05 *Owner's Liability Insurance*

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

#### 5.06 *Property Insurance*

- A. Unless otherwise provided in the Supplementary Conditions, Owner shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee;
  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, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, 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.
  3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
  4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
  5. allow for partial utilization of the Work by Owner;
  6. include testing and startup; and
  7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such equipment breakdown insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other loss payee to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 to protect the interests of Contractor, Subcontractors, or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount will be borne by Contractor, Subcontractors, or others suffering any such loss, and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.
- E. If Contractor requests in writing that other special insurance be included in the property insurance policies provided under this Paragraph 5.06, Owner shall, if possible, include such

insurance, and the cost thereof will be charged to Contractor by appropriate Change Order. Prior to commencement of the Work at the Site, Owner shall in writing advise Contractor whether or not such other insurance has been procured by Owner.

#### 5.07 *Waiver of Rights*

- A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and Contractor waive all rights against each other and their 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 Subcontractors and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (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 as trustee 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 utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them.

#### 5.08 *Receipt and Application of Insurance Proceed*

- A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner as fiduciary for the loss payees, as their interests may appear, subject to the requirements of any applicable mortgage clause and of Paragraph 5.08.B. Owner shall deposit in a separate account any money so received and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special

agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof, and the Work and the cost thereof covered by an appropriate Change Order.

- B. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within 15 days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

#### 5.09 *Acceptance of Bonds and Insurance; Option to Replace*

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

#### 5.10 *Partial Utilization, Acknowledgment of Property Insurer*

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

### **ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES**

#### 6.01 *Supervision and Superintendence*

- A. Contractor shall supervise, inspect, and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction. Contractor shall not be responsible for the negligence of Owner or Engineer in the design or specification of a specific means, method, technique, sequence, or procedure of construction which is shown or indicated in and expressly required by the Contract Documents.

- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer except under extraordinary circumstances.

6.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. Except as otherwise required for the safety or protection of persons or the Work or property at the Site or adjacent thereto, and except as otherwise stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities, and all other facilities and incidentals necessary for the performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

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

6.05 *Substitutes and "Or-Equals"*

- A. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification

or description is intended to establish the type, function, appearance, and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent, or “or-equal” item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be submitted to Engineer for review under the circumstances described below.

1. *“Or-Equal” Items:* If in Engineer’s sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an “or-equal” item, in which case review and approval of the proposed item may, in Engineer’s sole discretion, be accomplished without compliance with some or all of the requirements for approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
  - a. in the exercise of reasonable judgment Engineer determines that:
    - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
    - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and
    - 3) it has a proven record of performance and availability of responsive service.
  - b. Contractor certifies that, if approved and incorporated into the Work:
    - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
    - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
2. *Substitute Items:*
  - a. If in Engineer’s sole discretion an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
  - b. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.
  - c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented by the General Requirements, and as Engineer may decide is appropriate under the circumstances.
  - d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
    - 1) shall certify that the proposed substitute item will:
      - a) perform adequately the functions and achieve the results called for by the general design,
      - b) be similar in substance to that specified, and
      - c) be suited to the same use as that specified;
    - 2) will state:
      - a) the extent, if any, to which the use of the proposed substitute item will prejudice Contractor’s achievement of Substantial Completion on time,
      - b) whether use of the proposed substitute item in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for other work on the Project) to adapt the design to the proposed substitute item, and

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

#### 6.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.
- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted



a list thereof in accordance with the Supplementary Conditions, Owner's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.

- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents:
  - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity; nor
  - 2. shall create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier, or other individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.
- F. The divisions and sections of the Specifications and the identifications of any Drawings shall not control Contractor in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.
- G. All Work performed for Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as a loss payee on the property insurance provided in Paragraph 5.06, the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, Engineer, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or loss payees (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 such policies and any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

#### 6.07 *Patent Fees and Royalties*

- A. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design,

process, product, or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product, or device is specified in the Contract Documents for use in the performance of the Work and if, to the actual knowledge of Owner or Engineer, its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents.

- B. To the fullest extent permitted by Laws and Regulations, 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.

#### 6.08 *Permits*

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

#### 6.09 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.
- B. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such Work. However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.

- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

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

6.11 *Use of Site and Other Areas*

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

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof, or of any adjacent land or areas resulting from the performance of the Work.
2. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law.
3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, 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 claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer, or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

- B. *Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

- C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

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

6.12 *Record Documents*

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

6.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. 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;
  - 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
  - 3. other property at the Site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities, and Underground Facilities not designated for removal, relocation, or replacement in the course of construction.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property from damage, injury, or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and other utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. 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 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or 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 for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with Paragraph 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

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

6.15 *Hazard Communication Programs*

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

6.16 *Emergencies*

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

6.17 *Shop Drawings and Samples*

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

1. *Shop Drawings:*

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples:*

- a. Submit number of Samples specified in the Specifications.
- b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

C. *Submittal Procedures:*

1. Before submitting each Shop Drawing or Sample, Contractor shall have:
  - a. reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents;
  - 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 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 and approval of that submittal.
3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawings or Sample submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. *Engineer's Review:*

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

E. *Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and submit, as required, new Samples for review

and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.18 *Continuing the Work*

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

6.19 *Contractor's General Warranty and Guarantee*

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

6.20 *Indemnification*

- A. 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 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 6.20.A shall not be limited in any way by any limitation on the amount or type of damages, compensation, or benefits payable by or for Contractor or any such Subcontractor, Supplier, or other individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, 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.

#### 6.21 *Delegation of Professional Design Services*

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



- E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

## **ARTICLE 7 – OTHER WORK AT THE SITE**

### *7.01 Related Work at Site*

- A. Owner may perform other work related to the Project at the Site with Owner’s employees, or through other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
  - 1. written notice thereof will be given to Contractor prior to starting any such other work; and
  - 2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.
- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner, and Owner, if Owner is performing other work with Owner’s employees, proper and safe access to the Site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work with theirs. Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering 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. The duties and responsibilities of Contractor under this Paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.
- C. If the proper execution or results of any part of Contractor’s Work depends upon work performed by others under this Article 7, Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor’s Work. Contractor’s failure to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor’s Work except for latent defects and deficiencies in such other work.

### *7.02 Coordination*

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

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

7.03 *Legal Relationships*

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's wrongful actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful action or inactions.

**ARTICLE 8 – OWNER'S RESPONSIBILITIES**

8.01 *Communications to Contractor*

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

8.02 *Replacement of Engineer*

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

8.03 *Furnish Data*

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

8.04 *Pay When Due*

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

8.05 *Lands and Easements; Reports and Tests*

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

8.06 *Insurance*

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

8.07 *Change Orders*

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

8.08 *Inspections, Tests, and Approvals*

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

8.09 *Limitations on Owner's Responsibilities*

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

8.10 *Undisclosed Hazardous Environmental Condition*

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

8.11 *Evidence of Financial Arrangements*

A. 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.

8.12 *Compliance with Safety Program*

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 pursuant to Paragraph 6.13.D.

**ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION**

9.01 *Owner's Representative*

A. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents.

9.02 *Visits to Site*

A. Project Representative 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 degree of confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and observations, Engineer will keep Owner informed of the progress

of the Work and will endeavor to guard Owner against defective Work.

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

9.03 *Project Representative*

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

9.04 *Authorized Variations in Work*

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

9.05 *Rejecting Defective Work*

- A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in Paragraph 13.04, whether or not the Work is fabricated, installed, or completed.

9.06 *Shop Drawings, Change Orders and Payments*

- A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.
- B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.
- C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.

D. In connection with Engineer's authority as to Applications for Payment, see Article 14.

9.07 *Determinations for Unit Price Work*

A. Engineer will review with Contractor the determinations on such matters as payment before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

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

A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within 30 days of the event giving rise to the question.

B. Engineer will, with reasonable promptness, render a written decision on the issue referred. If Owner or Contractor believes that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.

C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.

D. When functioning as interpreter and judge under this Paragraph 9.08, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity.

9.09 *Limitations on Engineer's Authority and Responsibilities*

A. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise, or performance of any authority or responsibility by Engineer shall create, impose, or give rise to any duty in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.

B. Engineer will not supervise, direct, control, or have authority over or be responsible for Contractor's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

D. Engineer's review of the final Application for Payment and accompanying documentation

and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A will only be to determine generally that their content complies with the requirements of, and in the case of certificates of inspections, tests, and approvals that the results certified indicate compliance with, the Contract Documents.

- E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

9.10 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant to Paragraph 6.13.D.

**ARTICLE 10 – CHANGES IN THE WORK; CLAIMS**

10.01 *Authorized Changes in the Work*

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

10.02 *Unauthorized Changes in the Work*

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

10.03 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:
  - 1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A, or (iii) agreed to by the parties;
  - 2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
  - 3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; provided that, in lieu of

executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the Progress Schedule as provided in Paragraph 6.18.A.

#### 10.04 *Notification to Surety*

- A. If 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.

#### 10.05 *Claims*

- A. Notice. Claims must be made by written notice. The responsibility to substantiate Claims shall rest with the party making the Claim.
- B. Time Limits on Claims. Written notice of any condition or event for which a claim is subsequently to be made by the Contractor shall be made to the Owner in writing within ten (10) days after the first observance of such condition or event. A written claim for damages or additional compensation setting forth in full detail the labor, material and other costs and the total amount of the claim and the reasons therefor, shall be given to the Owner by the Contractor, with a copy to the Engineer, within twenty (20) days after the first notice of such condition or event and if such condition or event continues, a similar written claim shall be presented every thirty (30) days thereafter. The Contractor expressly agrees that failure to give such notice of such condition or event and to present such detailed claims within the times specified shall constitute a binding waiver of any claim based upon such condition or event. Knowledge of the condition or event on the part of the Owner shall not affect the requirements for such written notice and written claims within the specified times.
- C. Continuing Contract Performance. Pending final resolution of a Claim, unless otherwise agreed in writing the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.
- D. Claims After Termination or Substantial Completion. Within thirty (30) days after Contractor's receipt of a Certificate of Substantial Completion and also in the event of a declared termination of the Contract before substantial completion, the Contractor shall give the Owner written notice of any claim it intends to make against the Owner arising out of or in relation to the Contract; provided, that written notice of a claim based upon an event which occurs after receipt by the Contractor of a Certificate of Substantial Completion may be so given within thirty (30) days after the occurrence of the event upon which the claim is based but in no event later than thirty (30) days after Owner has made Final Payment. The notice of claim shall state the amount claimed and shall specify in detail the nature, grounds and manner of computation of the amount of the claim. The fact that the Contractor has given any notice or presented any claim required by any other provision of the Contract shall not relieve it from giving the notice required by this section of the Contract nor shall giving the notice required by this section relieve the Contractor from the effect of failure to give any notice or present any claim as required by any other paragraph or section of the Contract.
- E. Claims for Concealed or Unknown Conditions. If conditions are encountered at the site which

are (i) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (ii) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, or (iii) hazardous materials at the site contain constituents or are present in quantities not disclosed in available information or they have characteristics or properties not disclosed by such information, and such constituents, characteristics, properties, or quantities increase the risk of hazard to human health or the environment involved in the performance of the work under this Agreement or the Dillingham Landfill is not designed or permitted to dispose of hazardous materials with such undisclosed constituents, characteristics, properties, or quantities, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than 21 days after first observance of the conditions. The Owner's Representative will promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Owner's Representative determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the contract is justified, the Owner's Representative shall so notify the Owner and Contractor in writing, stating the reasons. Claims by either party in opposition to such determination must be made within 21 days after the Owner's Representative has given notice of his decision under this subparagraph. If the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Owner's Representative for initial determination, subject to further proceedings pursuant to Paragraph 16.01. No adjustment in the Contract Time or Contract Sum shall be permitted, however, in connection with a concealed or unknown condition which does not differ materially from those conditions disclosed or which reasonably should have been disclosed by the Contractor's prior inspections, tests, reviews and pre-bid investigation for the Project.

- F. Claims for Additional Cost. If the Contractor wishes to make Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Paragraph 4.06.
- G. If the Contractor believes additional cost is involved for reasons including but not limited to (i) a written interpretation from the Owner's Representative, (ii) an order by the Owner to stop the Work where the Contractor was not at fault, (iii) a written order for a minor change in the Work issued by the Owner's Representative, (iv) failure of payment by the Owner, (v) termination of the Contract by the Owner, (vi) Owner's suspension or (vii) other grounds, Claim shall be filed in accordance with the procedure established herein.
- H. Claims for Additional Time.
1. If the Contractor wishes to make Claim for an increase in the Contract Time, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary.
  2. If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were highly unusual for the period of time and could not have been reasonably anticipated, and that weather conditions



had an adverse effect on the scheduled construction. No Claim shall be allowed for weather conditions that were not highly unusual.

- I. Injury or Damage to Person or Property. If Contractor suffers injury or damage to person or property because of an act or omission of the other party, of any of the other party's employees or agents, or of others for whose acts such party is legally liable, written notice of such injury or damage, whether or not insured, shall be given to Owner within a reasonable time not exceeding 21 days after first observance. The notice shall provide sufficient detail to enable Owner to investigate the matter. If a Claim for additional cost or time is to be asserted as a result, it shall be filed as provided in Subparagraphs 10.05.F or 10.05.G.
- J. Unit Prices. If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed in a proposed Change Order or Construction Change Directive so that application of such unit prices to quantities or Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

## **ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK**

### *11.01 Cost of the Work*

- A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall not include any of the costs itemized in Paragraph 11.01.B, 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, vacation and holiday pay applicable thereto. The expenses of performing Work outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
  2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.
  3. Payments made by Contractor to Subcontractors for Work performed by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner, who will then

determine, with the advice of Engineer, which bids, if any, will be acceptable. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in this Paragraph 11.01.

4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys, and accountants) employed for services specifically related to the Work.
5. Supplemental costs including the following:
  - a. The proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
  - b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office, and temporary facilities at the Site, and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost, less market value, of such items used but not consumed which remain the property of Contractor.
  - c. Rentals of all construction equipment and machinery, and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, assembly, dismantling, and removal thereof. All such costs shall be in accordance with the terms of said rental agreements. The rental of any such equipment, machinery, or parts shall cease when the use thereof is no longer necessary for the Work.
  - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, 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 5.06.D), provided such losses and damages have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages, and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee.
  - g. The cost of utilities, fuel, and sanitary facilities at the Site.
  - h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, express and courier services, and similar petty cash items in connection with the Work.
  - i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks, and other personnel employed by Contractor, whether at the Site or in Contractor's principal or branch office for general administration of the Work

and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.

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

#### 11.02 Allowances

- A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.
- B. *Cash Allowances:*
1. Contractor agrees that:
    - a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
    - b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.
- C. *Contingency Allowance:*
1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.
- D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

### ARTICLE 12 – CHANGE OF CONTRACT PRICE; CHANGE OF CONTRACT TIMES

## 12.01 *Change of Contract Price*

- A. The Contract Price may only be changed by a Change Order. Any Claim for an adjustment in the Contract Price shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. The value of any Work covered by a Change Order or of any Claim for an adjustment in the Contract Price will be determined as follows:
  1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved;
  2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 12.01.C.2); or
  3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under Paragraph 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:
  1. a mutually acceptable fixed fee; or
  2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:
    - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
    - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
    - c. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of Paragraphs 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor;
    - d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;
    - e. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and
    - f. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with Paragraphs 12.01.C.2.a through 12.01.C.2.e, inclusive.

## 12.02 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim

to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.

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

### 12.03 *Delays*

- A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions, or acts of God.
- B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.
- D. Owner, Engineer, and their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall not be liable to Contractor for any claims, costs, losses, or damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Contractor on or in connection with any other project or anticipated project.
- E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

## **ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK**

### 13.01 *Notice of Defects*

- A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. Defective Work may be rejected, corrected, or accepted as provided in this Article 13.

### 13.02 *Access to Work*

- A. Owner, Engineer, their consultants and other representatives and personnel of Owner, independent testing laboratories, and governmental agencies with jurisdictional interests will have access to the Site and the Work at reasonable times for their observation, 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.

### 13.03 *Tests and Inspections*

- A. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests, or approvals and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
  - 1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
  - 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in Paragraph 13.04.C; and
  - 3. as otherwise specifically provided in the Contract Documents.
- C. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested, or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests, or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection or approval.
- D. Contractor shall be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests, or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work; or acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.
- E. If any Work (or the work of others) that is to be inspected, tested, or approved is covered by Contractor without written concurrence of Engineer, Contractor shall, if requested by Engineer, uncover such Work for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

### 13.04 *Uncovering Work*

- A. If any Work is covered contrary to the written request of Engineer, it must, if requested by Engineer, be uncovered for Engineer's observation and replaced at Contractor's expense.
- B. If Engineer considers it necessary or advisable that covered Work be observed by Engineer

or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as Engineer may require, that portion of the Work in question, furnishing all necessary labor, material, and equipment.

- C. If it is found that the uncovered Work is defective, Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such uncovering, exposure, observation, inspection, and testing, and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others); and Owner shall be entitled to an appropriate decrease in the Contract Price, if deficiencies are not repaired at the Contractors expense. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.
- D. If the uncovered Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

#### 13.05 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise to any duty on the part of Owner to exercise this right for the benefit of Contractor, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

#### 13.06 *Correction or Removal of Defective Work*

- A. Promptly after receipt of written notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).
- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

#### 13.07 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed by the terms of any applicable special guarantee required by the Contract Documents) or by any specific provision of the Contract Documents, any Work is found to be defective, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with

Owner's written instructions:

1. repair such defective land or areas; or
  2. correct such defective Work; or
  3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
  4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. All claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

#### 13.08 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and for the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work, and Owner shall be entitled to an appropriate decrease in the Contract Price, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

### **ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION**

#### 14.01 *Schedule of Values*



- A. The Schedule of Values established as provided in Paragraph 2.07.A will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

#### 14.02 *Progress Payments*

##### A. *Applications for Payments:*

1. At least 20 days before the date established in the Agreement for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the Site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

##### B. *Review of Applications:*

1. Engineer will, within 10 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's observations of the executed Work as an experienced and qualified design professional, and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:
  - a. the Work has progressed to the point indicated;
  - b. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, 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 9.07, 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 Documents; 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 moneys paid on account of the Contract Price, or
    - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
  5. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:
    - a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
    - b. the Contract Price has been reduced by Change Orders;
    - c. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

*C. Payment Becomes Due:*

1. Ten days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

*D. Reduction in Payment:*

1. Owner may refuse to make payment of the full amount recommended by Engineer because:
  - a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
  - b. Liens have been filed in connection with the Work, except where Contractor has delivered a specific bond satisfactory to Owner to secure the satisfaction and discharge of such Liens;
  - c. there are other items entitling Owner to a set-off against the amount recommended; or
  - d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld,

or any adjustment thereto agreed to by Owner and Contractor, when Contractor remedies the reasons for such action.

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 14.02.C.1 and subject to interest as provided in the Agreement.

#### 14.03 *Contractor's Warranty of Title*

- A. Contractor warrants and guarantees that title to all Work, materials, and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

#### 14.04 *Substantial Completion*

- A. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion.
- B. Promptly after Contractor's notification, Owner, Contractor, and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will, within 14 days after submission of the tentative certificate to Owner, notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will, within said 14 days, execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner.
- D. At the time of delivery of the tentative certificate of Substantial Completion, Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, and protection of the Work, maintenance, heat, utilities, insurance, and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.
- E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the tentative list.

#### 14.05 *Partial Utilization*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which Owner, Engineer, and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, subject to the following conditions:
1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete, Contractor, Owner, and Engineer will follow the procedures of Paragraph 14.04.A through D for that part of the Work.
  2. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work.
  3. Within a reasonable time after either such request, Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.
  4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

#### 14.06 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly make a final inspection with Owner and Contractor and will notify Contractor in writing of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

#### 14.07 *Final Payment*

A. *Application for Payment:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
  - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.6;
  - b. consent of the surety, if any, to final payment;
  - c. a list of all Claims against Owner that Contractor believes are unsettled; and

- d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.
3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material, and equipment for which a Lien could be filed; and (ii) all payrolls, material and equipment bills, and other indebtedness connected with the Work for which Owner 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.

*B. Engineer's Review of Application and Acceptance:*

1. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final Application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application for Payment to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of Paragraph 14.09. Otherwise, Engineer will return the Application for Payment to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application for Payment.

*C. Payment Becomes Due:*

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

*14.08 Final Completion Delayed*

- A. If, through no fault of Contractor, final completion of the Work is significantly delayed, and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if bonds have been furnished as required in Paragraph 5.01, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

*14.09 Waiver of Claims*

- A. The making and acceptance of final payment will constitute:

1. a waiver of all Claims by Owner against Contractor, except Claims arising from unsettled Liens, from defective Work discovered by Owner after final inspection pursuant to Paragraph 14.06, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and
2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

## **ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION**

### *15.01 Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.
- B. The Owner may suspend the Work when adverse winter weather conditions make it impractical to secure the desired results. Where the Work is suspended for adverse winter weather conditions, the Contractor shall not be entitled to additional compensation. Suspension of work for adverse winter weather conditions generally occurs on October 15 of each construction season. Although this date may vary from year to year, the Contractor should plan his Work in anticipation of a Winter Suspension occurring at or about this time each year.

### *15.02 Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will justify termination for cause:
  1. Contractor's persistent failure to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the Progress Schedule established under Paragraph 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
  2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
  3. Contractor's repeated disregard of the authority of Engineer; or Contractor's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:
  1. exclude Contractor from the Site, and take possession of the Work and of all Contractor's tools, appliances, construction equipment, and machinery at the Site, and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion);
  2. incorporate in the Work all materials and equipment stored at the Site or for which Owner has paid Contractor but which are stored elsewhere; and
  3. complete the Work as Owner may deem expedient.

- C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) sustained by Owner arising out of or relating to completing the Work, such excess will be paid to Contractor. If such claims, costs, losses, and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses, and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and, when so approved by Engineer, incorporated in a Change Order. When exercising any rights or remedies under this Paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- E. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B and 15.02.C.

15.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
  1. completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;
  2. expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials, or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;
  3. all claims, costs, losses, and damages (including but not limited to all fees and charges of engineers, architects, attorneys, and other professionals and all court or arbitration or other dispute resolution costs) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
  4. reasonable expenses directly attributable to termination.
- B. Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

15.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act

on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.

- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

## **ARTICLE 16 – DISPUTE RESOLUTION**

### *16.01 Methods and Procedures*

- A. Decision of Owner's Representative. Claims shall be referred initially to the Owner's Representative for action as provided in Paragraph 16.01 if the claimant first recognizes the claim prior to the date of final payment. A decision by the Owner's Representative, as provided in Subparagraph 16.01.C, shall be required as a condition precedent to litigation of a Claim between the Contractor and Owner as to all such matters arising prior to the date final payment is due, regardless of whether such matters relate to execution and progress of the Work or the extent to which the Work has been completed. The decision by the Owner's Representative in response to a Claim shall not be a condition precedent to litigation in the event
1. the position of Owner's Representative is vacant;
  2. the Owner's Representative has not received evidence or has failed to render a decision within agreed time limits,
  3. the Owner's Representative has failed to take action required under Subparagraph 16.01.C within 30 days after the Claim is made; or
  4. 45 days have passed after the Claim has been referred to the Owner's Representative.
- B. The Owner's Representative will review Claims and take one or more of the following preliminary actions within ten days of receipt of a Claim:
1. request additional supporting data;
  2. submit a schedule to the parties indicating when the Owner's Representative expects to take action;
  3. reject the claim in whole or in part, stating reasons for rejection;
  4. recommend approval of the Claim; or



5. suggest a compromise.
  6. The Owner's Representative may also, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim.
- C. If the Owner's Representative requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of such request, and shall either provide a response or the requested supporting data, advise the Owner's Representative when the response or supporting data will be furnished or advise the Owner's Representative that no supporting data will be furnished. Upon receipt of the response, or supporting data, if any, the Owner's Representative will either reject or approve the Claim in whole or in part.
- D. If a Claim has not been resolved after consideration of the foregoing and of further evidence presented by the parties or requested by the Owner's Representative, the Owner's Representative will notify the parties in writing that Owner's Representative's decision will be made within seven days. Upon expiration of such time period, the Owner's Representative will render to the parties the Owner's Representative's written decision relative to the Claim, including any recommended change in the Contract Sum or Contract Time or both. If there is a surety and there appears to be a possibility of a Contractor's default, the Owner's Representative may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.
- E. The parties hereto expressly agree that the Contractor shall have thirty (30) days after receipt of written notice that the claim has been rejected in whole or in part, to bring suit against the Owner and that otherwise, the claim, except the portion thereof allowed by the Owner, shall be forever barred. No suit shall be brought against the Owner on any claim arising out of or in connection with the Contract unless the requirements of this section applicable to the Contractor have been strictly complied with.
- F. By mutual consent of the parties involved, claims, disputes or other matters of controversy arising out of or related to the Contract, except those waived, may be subject to mediation as a condition precedent to litigation in a court of competent jurisdiction.
- G. Venue. Any lawsuit arising out of or in any way related to this Contract shall be exclusively brought and maintained in the Superior Court for the State of Alaska Third Judicial District at Dillingham, Alaska.

## ARTICLE 17 – MISCELLANEOUS

### 17.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
1. delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended; or
  2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

#### 17.02 *Computation of Times*

- A. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

#### 17.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee, or by other provisions of the Contract Documents. The provisions of this Paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right, and remedy to which they apply.

#### 17.04 *Survival of Obligations*

- A. All representations, indemnifications, warranties, and guarantees made in, required by, or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion, and acceptance of the Work or termination or completion of the Contract or termination of the services of Contractor.

#### 17.05 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

#### 17.06 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

END OF GENERAL CONDITIONS

SECTION 00 73 00

SUPPLEMENTARY CONDITIONS

TABLE OF CONTENTS OF SUPPLEMENTAL GENERAL CONDITIONS

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The Supplemental General Conditions contained herein amend or supplement the General Conditions, Section 00 72 00.

ARTICLE 5 – BONDS AND INSURANCE

5.04 Add the following after Paragraph 5.04.B

C. The limits of liability for the insurance required by Paragraph 5.04 of the General Conditions shall provide for the following:

<i>Paragraph</i>	<i>Insurance</i>	<i>Required</i>
<i>5.04.C.1</i>	<i>Contractor Provided Insurance</i>	<i>X</i>
<i>5.04.C.1.a &amp; All Subparagraphs</i>	<i>General Requirements</i>	<i>X</i>
<i>5.04.C.1.b</i>	<i>Commercial Automobile Liability</i>	<i>X</i>
<i>5.04.C.1.b.1</i>	“ “	<i>X</i>
<i>5.04.C.1.c</i>	<i>Workers' Compensation &amp; Required Employer's Liability</i>	<i>X</i>
<i>5.04.C.1.c.1</i>	“ “ “ “ “	<i>X</i>
<i>5.04.C.1.c.2</i>	“ “ “ “ “	<i>X</i>
<i>5.04.C.1.d</i>	<i>Commercial General Liability</i>	<i>X</i>
<i>5.04.C.1.d.1</i>	“ “ “ “ “	<i>X</i>
<i>5.04.C.1.g</i>	<i>Builder's Risk</i>	<i>X</i>
<i>5.04.C.1.h</i>	<i>Professional Liability</i>	<i>X</i>

5.04.C.1 Contractor Provided Insurance.

5.04.C.1.a General Requirements.

- 1) Contractor shall carry insurance in the types and amounts indicated below for the duration of the Contract, which shall include items owned by Owner in the care, custody and control of Contractor prior to and during construction and warranty period.
- 2) Contractor must complete and forward the Certificate of Insurance, Section 00 62 16, to Owner before the Contract is executed as verification of age required below. Contractor shall not commence Work until the required insurance is obtained and until such insurance has been reviewed by Owner. Approval of insurance by Owner shall not relieve or decrease the liability of Contractor hereunder and shall not be construed to be a limitation of liability on the part of Contractor. Contractor must also complete and forward the Certificate of Insurance, Section 00 62 16, to Owner whenever a previously identified policy period has expired as verification of continuing coverage.
- 3) Contractor's insurance coverage is to be written by companies licensed to do business in the State of Alaska at the time the policies are issued and shall be written by companies with A.M. Best ratings of B+VII or better.
- 4) All endorsements naming the Owner as additional insured, waivers, and notices of cancellation endorsements as well as the Certificate of Insurance shall indicate: City of Dillingham, P.O. Box 889, Dillingham, Alaska 99576.
- 5) The "other" insurance clause shall not apply to the Owner where the Owner is an additional

insured shown on any policy. It is intended that policies required in the Contract, covering both Owner and Contractor, shall be considered primary coverage as applicable.

- 6) If insurance policies are not written for amounts specified below, Contractor shall carry Umbrella or Excess Liability Insurance for any differences in amounts specified. If Excess Liability Insurance is provided, it shall follow the form of the primary coverage.
- 7) Owner shall be entitled, upon request and without expense, to receive certified copies of policies and endorsements thereto and may make any reasonable requests for deletion or revision or modification of particular policy terms, conditions, limitations, or exclusions except where policy provisions are established by law or regulations binding upon either of the parties hereto or the underwriter on any such policies.
- 8) Owner reserves the right to review the insurance requirements set forth during the effective period of this Contract and to make reasonable adjustments to insurance coverage, limits, and exclusions when deemed necessary and prudent by Owner based upon changes in statutory law, court decisions, the claims history of the industry or financial condition of the insurance company as well as Contractor.
- 9) Contractor shall not cause any insurance to be canceled nor permit any insurance to lapse during the term of the Contract or as required in the Contract.
- 10) Contractor shall be responsible for premiums, deductibles and self-insured retentions, if any, stated in policies. All deductibles or self-insured retentions shall be disclosed on the Certificate of Insurance.
- 11) Contractor shall provide Owner thirty (30) days written notice of erosion of the aggregate limits below occurrence limits for all applicable coverages indicated within the Contract.
- 12) If Owner owned property is being transported or stored off-site by Contractor, then the appropriate property policy will be endorsed for transit and storage in an amount sufficient to protect Owner's property.
- 13) The insurance coverages required under this contract are required minimums and are not intended to limit the responsibility or liability of Contractor.

5.04.C.1.b Commercial Automobile Liability Insurance. Provide coverage for all owned, non-owned and hired vehicles. The policy shall contain the following endorsements in favor of Owner:

- 1) Waiver of Subrogation endorsement;
- 2) 30 day Notice of Cancellation endorsement; and
- 3) Additional Insured endorsement.

Provide coverage in the following types and amounts:

1. A minimum Combined Single Limit of \$1,000,000 per occurrence for Bodily Injury and Property Damage.

5.04.C.1.c Workers' Compensation And Employers' Liability Insurance. Coverage shall be consistent with statutory benefits outlined by the Alaska Division of Workers' Compensation, AS 23.30.045. Contractor shall assure compliance with this Statute by submitting two (2) copies of a standard certificate of coverage to Owner's Representative for every person providing services on the Project as acceptable proof of coverage. The Certificate of Insurance, Section 00 62 16, must be presented as evidence of coverage for Contractor. Contractor's policy shall apply to the State of Alaska and include these endorsements in favor of Owner:

- 1) Waiver of Subrogation; and
- 2) 30 day Notice of Cancellation.

The minimum policy limits for Employers' Liability Insurance coverage shall be as follows:

1. \$100,000 Bodily Injury per Accident, \$500,000 Bodily Injury by Disease Policy Limit and \$100,000 Bodily Injury by Disease Each Employee.
2. Other Coverage Extension & Exclusions:
  - a. If Contractor directly utilizes labor outside of the State of Alaska in the prosecution of the Work, "Other State" endorsement shall be required as a condition of the Contract.

5.04.C.1.d Commercial General Liability Insurance. The Policy shall contain the following provisions:

- 1) Blanket contractual liability coverage for liability assumed under the Contract and all
- 2) Completed Operations/Products Liability for the duration of the warranty period.
- 3) Explosion, Collapse and Underground (X, C & U) coverage.
- 4) Independent Contractors coverage.
- 5) Aggregate limits of insurance per project.
- 6) Owner listed as an additional insured.
- 7) 30 day notice of cancellation in favor of Owner.
- 8) Waiver of Transfer of Recovery Against Others in favor of Owner.

Provide coverages A&B with minimum limits as follows:

1. A General Policy limit of \$1,000,000 Each Occurrence and \$2,000,000 Annual Aggregate.
2. Products/Completed Operations limit of \$1,000,000 Each Occurrence and \$2,000,000 Annual Aggregate.
3. A Personal Injury limit of \$1,000,000 Each Occurrence.

5.04.C.1.g Builder's Risk. Provide coverage in an amount equal to 100% of the amount of the Bid award.

5.04.C.1.h Professional Liability Insurance. For Work, which requires professional engineering or professional survey services, to meet the requirements of the Contract, including but not limited to trench safety systems, traffic control plans, and construction surveying, the CONTACTOR or Subcontractors, responsible for performing the professional services shall provide Professional Liability Insurance with a minimum limit of \$500,000 per claim and in the aggregate to pay on behalf of the assured all sums which the assured shall become legally obligated to pay as damages by reason of any negligent act, error, or omission committed with respect to all professional services provided in due course of the Work of this Contract.

Delete Paragraph 5.06.A in its entirety and insert the following in its place:

A. Contractor shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof. Contractor shall be responsible for any deductible or self-insured retention. This insurance shall:

1. include the interests of Owner, Contractor, Subcontractors, Engineer, and [here identify by name (not genre) any other individuals or entities to be listed as loss payees] and the officers, directors, partners, employees, agents and other consultants and subcontractors of any of them, each of whom is deemed to have an insurable interest and shall be listed as an insured or loss payee;
2. be written on a Builder's Risk "all-risk" policy form that shall at least include insurance for physical loss and 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, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, 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 these Supplementary Conditions.

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
4. cover materials and equipment stored at the Site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer;
5. allow for partial utilization of the Work by Owner;

## ARTICLE 8 – OWNERS’ RESPONSIBILITIES

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Add the following:

### 8.13 Permits:

Owner will obtain and pay for the following permits, licenses and/or fees:

1. State of Alaska Domestic Wastewater Disposal Systems Approval to Construct.
2. Department of the Army General Permit

## ARTICLE 17 – MISCELLANEOUS

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Add the following:

### 17.07 Stormwater Pollution Prevention Plan

- A. Preparation of a Stormwater Pollution Prevention Plan (SWPPP) is required for the project in accordance with Section 31 25 14 - Stormwater Pollution Prevention Plan. Payment for the SWPPP shall be considered incidental to the contract.

### 17.08 Equal Opportunity Clause

- A. The contractor shall not discriminate on the basis of race, color, national origin or sex in the performance of this contract. The contractor shall carry out applicable requirements of 40 CFR part 33 in the award and administration of contracts awarded under EPA financial assistance agreements. Failure by the contractor to carry out these requirements is a material breach of this contract which may result in the termination of this contract or other legally available remedies.

END OF SUPPLEMENTARY CONDITIONS

## SECTION 00 73 43

### WAGE RATE REQUIREMENTS

#### 1. Payment

##### A. Classification Definitions

Definitions for classifications shall conform to the current "Dictionary of Occupational Titles" as published by the U.S. Department of Labor.

##### B. Minimum Wages

Workers on Project shall be paid not less than wage rates, including fringe benefits, as published by the Alaska Department of Labor and Workforce Development Pamphlet No. 600, latest edition (See Section 00 73 43B). Such wage rates shall be used throughout the Contract. If a classification is to be used, which is not listed in the attached wage rates, Contractor shall submit to Owner rates and classification proposed for use, for approval, prior to performance of the Work.

In addition, Contractor shall comply with Davis-Bacon Requirements (See Section 00 73 43C). Wage rates shall be the higher of the Alaska Labor Standards, Reporting, and Prevailing Wage Rate Determination and the Federal Wage Rates (See Section 00 73 43D) for each job classification.

NOTE: The terms journeyman and apprentice apply to both union and independent workers and are not intended to imply that these positions are union workers only.

All laborers and mechanics working upon the Work for this Project shall be paid unconditionally and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by Secretary of Labor under the Copeland Act, Title 29 CFR, Part 3) full wages accrued and when due, computed at rates not less than wage rates bound herein pertaining to type of Work being performed. Salaried specialists (project superintendent and administrative personnel only) in the permanent employment of Contractor do not fall under any Wage Classification. Wage rates shall be posted by Contractor at site(s) of Work in prominent, easily accessible places where they can be seen by all workers.

##### C. Overtime Requirements

No Contractor, Subcontractor, or Sub-subcontractor contracting for any part of contract Work which may require or involve the employment of laborers or mechanics shall require or permit any laborer or mechanic in any workweek in which he is employed on such Work, to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times his basic rate of pay for all hours in excess of forty hours in such workweek.

#### 2. Apprentices

##### Locally & Federally Funded Projects

Apprentices and Trainees will be permitted to work as such only when they are registered, individually, under a bonafide Apprenticeship or Trainee program registered with the Bureau of Apprenticeship and Training, United States Department of Labor. The allowable ratio of Apprentices or Trainees to journeymen in any craft classification shall not be greater than the ratio permitted to Contractor as



stated in the registered apprenticeship program standards. Any employee listed on a payroll at an Apprentice or Trainee wage rate, who is not registered as above, shall be paid the wage rate provided in Contract for Work employee actually performed. Contractor, Subcontractor, or Sub-subcontractor shall furnish to Owner written evidence of registration of his program for Apprentices and Trainees as well as of the appropriate ratios and wage rates, for the area of construction prior to using any Apprentices or Trainees on this Contract.

### 3. Withholding of Payments

Owner may withhold or cause to be withheld from Contractor as much of the accrued payments as necessary to pay laborers and mechanics employed by Contractor, Subcontractors, or Sub-subcontractors the amount of wages required to comply with the Contract. In the event of nonpayment of wages to laborers or mechanics working on the site of the Work of this Contract, Owner may, after Written Notice to Contractor, take such action as may be necessary to cause suspension of any further payments or advance of funds to Contractor until such violations have ceased and until restitution has been made. Payments may also be withheld if Contractor fails to maintain weekly payroll reports or fails to provide copies in a timely manner upon request of Owner.

### 4. Payrolls

A. Contractor shall keep records showing:

- 1) the name and occupation of each worker employed by the Contractor or subcontractor(s) in the construction of the public work; and
- 2) the actual per diem wages paid to each worker and
- 3) Employee Certification. Contractor, Subcontractor, and Sub-subcontractor shall identify in writing, the classification agreed to by all laborers and mechanics employed by them in the execution of the Contract and pay not less than rates specified in the attached Wage Rates. Contractor shall prepare a completed form for the signature of Employee and a witness shall sign the form in the presence of Employee. If work performed by worker is different than the trade classification agreed upon, the worker shall be paid for that work no less than the minimum prevailing wage for that specified trade.

B. The record shall be open at all reasonable hours to inspection by the officers and agents of the Owner as requested. Contractor will be responsible to provide copies of records as requested by the Owner within two (2) working days. Payrolls relating to this Work shall be maintained during term of Contract and preserved for a period of three (3) years thereafter by Contractor for all laborers and mechanics working on the Work.

C. A Statement of Compliance, a letter signed and dated by party responsible for supervising the payment of persons employed by Contractor or subcontractor shall accompany payrolls required by Owner. The Statement of Compliance letter shall identify but is not limited to:

- 1) name of signatory party and title;
- 2) name of project, payroll period; and
- 3) name of Contractor or Subcontractor.

The signed letter attests that the payroll complies with 29CFR issued by the Secretary of Labor.

### 5. Complaints and Penalties

A public body awarding a contract, and an agent or officer of the public body, shall, take cognizance

of complaints of all violations of Alaska Statute Title 36 or applicable Federal Statutes committed in the execution of the contract; and withhold money forfeited or required to be withheld under this chapter from the payments to the Contractor under the contract.

Confirmed Disciplinary action taken by Contractor against employees who provide information during an interview or investigation by the Owner on wages received, may result in suspension or debarment from consideration of award of Owner contracts.

6. Area Practice

- A. Building construction consists generally of all aspects of construction of buildings, which are sheltered enclosures with walk-in access for the purpose of housing persons, machinery, equipment or supplies, including without limitation the installation of utilities and equipment, both above and below grade level, as well as incidental demolition, grading, utilities, paving and other site work. Buildings need not be “habitable” to be classified as building construction and the installation of heavy machinery and/or equipment will not generally change a building construction project’s classification.
- B. The determination of Wage Rates includes all construction trades and work necessary to complete a building, regardless of the number of contracts involved, so long as all such contracts are closely related in purpose, time and place.

7. Open Records

Unless covered by an exception to mandatory disclosure under Alaska Statutes, any and all documents submitted to the Owner (City of Dillingham) become Public Records and are, therefore, subject to public disclosure.

END OF WAGE REQUIREMENTS

SECTION 00 73 43A

ALASKA LABOR STANDARDS, REPORTING,  
AND PREVAILING WAGE RATE DETERMINATION REPORTING

State of Alaska, Department of Labor, Laborers' and Mechanics' Minimum Rates of Pay, AS 36.05.10 and AS 36.05.050, Wage and Hour Administration Pamphlet No. 600, the latest edition published by the State of Alaska, Department of Labor and Workforce Development inclusive, are made a part of this contract by reference.

The Contractor is responsible for contacting the Alaska Department of Labor to determine compliance with current regulations and pay the filing fee of 1% or maximum amount.

Required Reporting During Contract (to be provided by every Contractor and Subcontractor):

- A. Certified Payrolls must be submitted every two weeks. Before the second Friday, each Contractor and Subcontractor must file Certified Payrolls with Statements of Compliance for the previous two weeks. If there was o activity for that pay period, indicate "*No Activity*". Indicate "*Start*" on your first payroll, and "*Final*" on your last payroll for this Project. Send to:

*Wage and Hour Section* Labor  
Law Compliance Division  
Alaska Department of Labor  
PO Box 020630  
Juneau, AK 99802-0630  
(907) 465-4839/4842

City Clerk  
City of Dillingham  
P.O. Box 889  
Dillingham, AK 99576  
(907) 842-5148

or

- B. Within 10 days of "Notice of Award/Notice to Proceed" make a list of all Subcontractors. Include their name, address, phone, estimated subcontract amount, and estimated start and finish dates. Send to:

*Wage and Hour Section* Labor  
Law Compliance Division  
Alaska Department of Labor  
PO Box 020630  
Juneau, AK 99802-0630  
(907) 465-4839/4842

City Clerk  
City of Dillingham  
P.O. Box 889  
Dillingham, AK 99576  
((907) 842-5148

or

- C. As part of the final payment request package:

Submit written certification for final completion, see Section 01 70 00 – Execution and Closeout Requirements.

Submit a final Subcontractor list complete with final subcontract amounts and including all equipment rentals (with operators).

END OF SECTION 00 73 43A





# MINIMUM RATES OF PAY For Laborers and Mechanics

Effective April 1, 2023

Issue 46

**PAMPHLET No. 600**

Title 36. Public Contracts  
AS 36.05

**DEPARTMENT OF LABOR  
AND WORKFORCE DEVELOPMENT**

Wage and Hour

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April 1, 2023

**TO ALL CONTRACTING AGENCIES:**

At the Alaska Department of Labor and Workforce Development our goal is putting Alaskans to work. This pamphlet is designed to help contractors awarded public construction contracts understand the most significant laws of the State of Alaska pertaining to prevailing wage.

This pamphlet identifies current prevailing wage rates for public construction contracts (any construction projects awarded for the State of Alaska or its political subdivisions, such as local governments and certain non-profit organizations). Because these rates may change in a subsequent determination, please be sure you are using the appropriate rates. The rates published in this edition become effective April 1, 2023.

The prevailing wage rates contained in this pamphlet are applicable to public construction projects with a final bid date of April 11, 2023, or later. As the law now provides, these rates will remain stable during the life of a contract or for 24 calendar months, whichever is shorter. **The 24-month period begins on the date the prime contract is awarded.** Upon expiration of the initial 24-month period, the latest wage rates issued by the department shall become effective for a subsequent 24-month period or until the original contract is completed, whichever occurs first. This process shall be repeated until the original contract is completed.

The term "original contract" means the signed contract that resulted from the original bid and any amendments, including changes of work scope, additions, extensions, change orders, and other instruments agreed to by the parties that have not been subject to subsequent open bid procedures.

If a higher federal rate is required due to partial federal funding or other federal participation, the higher rate must be paid.

For additional copies of this pamphlet go to: <http://labor.state.ak.us/lss/pamp600.htm>

For questions regarding prevailing wage or employment preference requirements, please contact the nearest Wage and Hour office. These offices are listed on Page x.

Sincerely,

A handwritten signature in blue ink that reads "Catherine Muñoz".

Catherine Muñoz  
Acting Commissioner

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**Note to Readers: The statutes and administrative regulations listed in this publication were taken from the official codes, as of the effective date of the publication. However, there may be errors or omissions that have not been identified and changes that occurred after the publication was printed.** This publication is intended as an informational guide only and is not intended to serve as a precise statement of the statutes and regulations of the State of Alaska. To be certain of current laws and regulations, please refer to the official codes.



## **EXCERPTS FROM ALASKA LAW**

### **Sec. 36.05.005. Applicability.**

This chapter applies only to a public construction contract that exceeds \$25,000.

### **Sec. 36.05.010. Wage rates on public construction.**

A contractor or subcontractor who performs work on a public construction contract in the state shall pay not less than the current prevailing rate of wages for work of a similar nature in the region in which the work is done. The current prevailing rate of wages is that contained in the latest determination of prevailing rate of wages issued by the Department of Labor and Workforce Development at least 10 days before the final date for submission of bids for the contract. The rate shall remain in effect for the life of the contract or for 24 calendar months, whichever is shorter. At the end of the initial 24-month period, if new wage determinations have been issued by the department, the latest wage determination shall become effective for the next 24-month period or until the contract is completed, whichever occurs first. This process shall be repeated until the contract is completed.

### **Sec. 36.05.040. Filing schedule of employees, wages paid, and other information.**

All contractors or subcontractors who perform work on a public construction contract for the state or for a political subdivision of the state shall, before the Friday of every second week, file with the Department of Labor and Workforce Development a sworn affidavit for the previous reporting period, setting out in detail the number of persons employed, wages paid, job classification of each employee, hours worked each day and week, and other information on a form provided by the Department of Labor and Workforce Development.

### **Sec. 36.05.045. Notice of work and completion; withholding of payment.**

- (a) Before commencing work on a public construction contract, the person entering into the contract with a contracting agency shall designate a primary contractor for purposes of this section. Before work commences, the primary contractor shall file a notice of work with the Department of Labor and Workforce Development. The notice of work must list work to be performed under the public construction contract by each contractor who will perform any portion of work on the contract and the contract price being paid to each contractor. The primary contractor shall pay all filing fees for each contractor performing work on the contract, including a filing fee based on the contract price being paid for work performed by the primary contractor's employees. The filing fee payable shall be the sum of all fees calculated for each contractor. The filing fee shall be one percent of each contractor's contract price. The total filing fee payable by the primary contractor under this subsection may not exceed \$5,000. In this subsection, "contractor" means an employer who is using employees to perform work on the public construction contract under the contract or a subcontract.
- (b) Upon completion of all work on the public construction contract, the primary contractor shall file with the Department of Labor and Workforce Development a notice of completion together with payment of any additional filing fees owed due to increased contract amounts. Within 30 days after the department's receipt of the primary contractor's notice of completion, the department shall inform the contracting agency of the amount, if any, to be withheld from the final payment.
- (c) A contracting agency
  - (1) may release final payment of a public construction contract to the extent that the agency has received verification from the Department of Labor and Workforce Development that
    - (A) the primary contractor has complied with (a) and (b) of this section;
    - (B) the Department of Labor and Workforce Development is not conducting an investigation under this title; and
    - (C) the Department of Labor and Workforce Development has not issued a notice of a violation of this chapter to the primary contractor or any other contractors working on the public construction contract; and

- (2) shall withhold from the final payment an amount sufficient to pay the department's estimate of what may be needed to compensate the employees of any contractors under investigation on this construction contract, and any unpaid filing fees.
- (d) The notice and filing fee required under (a) of this section may be filed after work has begun if
  - (1) The public construction contract is for work undertaken in immediate response to an emergency; and
  - (2) The notice and fees are filed not later than 14 days after the work has begun.
- (e) A false statement made on a notice required by this section is punishable under AS 11.56.210.

**Sec. 36.05.060. Penalty for violation of this chapter.**

A contractor who violates this chapter is guilty of a misdemeanor and upon conviction is punishable by a fine of not less than \$100 nor more than \$1,000, or by imprisonment for not less than 10 days nor more than 90 days, or by both. Each day a violation exists constitutes a separate offense.

**Sec. 36.05.070. Wage rates in specifications and contracts for public works.**

- (a) The advertised specifications for a public construction contract that requires or involves the employment of mechanics, laborers, or field surveyors must contain a provision stating the minimum wages to be paid various classes of laborers, mechanics, or field surveyors and that the rate of wages shall be adjusted to the wage rate under AS 36.05.010.
- (b) Repealed by §17 ch 142 SLA 1972.
- (c) A public construction contract under (a) of this section must contain provisions that
  - (1) the contractor or subcontractors of the contractor shall pay all employees unconditionally and not less than once a week;
  - (2) wages may not be less than those stated in the advertised specifications, regardless of the contractual relationship between the contractor or subcontractors and laborers, mechanics, or field surveyors;
  - (3) the scale of wages to be paid shall be posted by the contractor in a prominent and easily accessible place at the site of the work;
  - (4) the state or a political subdivision shall withhold so much of the accrued payments as is necessary to pay to laborers, mechanics, or field surveyors employed by the contractor or subcontractors the difference between
    - (A) the rates of wages required by the contract to be paid laborers, mechanics, or field surveyors on the work; and
    - (B) the rates of wages in fact received by laborers, mechanics, or field surveyors.

**Sec. 36.05.080. Failure to pay agreed wages.**

Every contract within the scope of AS 36.05.070 shall contain a provision that if it is found that a laborer, mechanic, or field surveyor employed by the contractor or subcontractor has been or is being paid a rate of wages less than the rate of wages required by the contract to be paid, the state or its political subdivision may, by written notice to the contractor, terminate the contractor's right to proceed with the work or the part of the work for which there is a failure to pay the required wages and to prosecute the work to completion by contract or otherwise, and the contractor and the contractor's sureties are liable to the state or its political subdivision for excess costs for completing the work.

**Sec. 36.05.090. Payment of wages from withheld payments and listing contractors who violate contracts.**

- (a) The state disbursing officer in the case of a state public construction contract and the local fiscal officer in the case of a political subdivision public construction contract shall pay directly to laborers, mechanics, or field surveyors from accrued payments withheld under the terms of the contract the wages due laborers, mechanics, or field surveyors under AS 36.05.070.
- (b) The state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees. A person appearing on this list and a firm, corporation, partnership, or association in which the person has an interest may not work as a contractor or

subcontractor on a public construction contract for the state or a political subdivision of the state until three years after the date of publication of the list. If the accrued payments withheld under the contract are insufficient to reimburse all the laborers, mechanics, or field surveyors with respect to whom there has been a failure to pay the wages required under AS 36.05.070, the laborers, mechanics, or field surveyors have the right of action or intervention or both against the contractor and the contractor's sureties conferred by law upon persons furnishing labor or materials, and in the proceedings it is not a defense that the laborers, mechanics, or field surveyors accepted or agreed to accept less than the required rate of wages or voluntarily made refunds.

**Sec. 36.05.900. Definition.**

In this chapter, "contracting agency" means the state or a political subdivision of the state that has entered into a public construction contract with a contractor.

**EXCERPTS FROM ALASKA ADMINISTRATIVE CODE**

\*\*\***Notice:** Regulations relating to board and lodging and per diem went into effect on November 25, 2018. The new regulations are excerpted here\*\*\*

**8 AAC 30.051. Purpose.** The purpose of 8 AAC 30.052 – 8 AAC 30.056 is to ensure that wages paid to laborers, mechanics, and field surveyors do not fall below the prevailing rate of pay.

**8 AAC 30.052. Board and lodging; remote sites.** (a) A contractor on a public construction project located 65 or more road miles from the international airport closest to the project area in either Fairbanks, Juneau, or Anchorage, or that is inaccessible by road in a two-wheel drive vehicle, shall provide adequate board and lodging to each laborer, mechanic, or field surveyor while the person is employed on the project. If commercial lodging facilities are not available, the contractor shall provide temporary lodging facilities. Lodging facilities must comply with all applicable state and federal laws. For a highway project, the location of the project is measured from the midpoint of the project.

(b) A contractor is not required to provide board and lodging:

(1) to a laborer, mechanic, or field surveyor who is a domiciled resident of the project area; or

(2) on a laborer, mechanic, or field surveyor's scheduled days off, when the person can reasonably travel between the project and the person's permanent residence; for the purposes of this paragraph, "scheduled day off" means a day in which a person does not perform work on-site, is not required to remain at or near the job location for the benefit of the contractor, and is informed of the day off at least seven days before the day off.

(c) Upon a contractor's written request, the commissioner may waive the requirements of (a) of this section where:

(1) the project is inaccessible by road in a two-wheel drive vehicle, but the laborer, mechanic, or field surveyor can reasonably travel between the project and the person's permanent residence within one hour; or

(2) a laborer, mechanic, or field surveyor is not a domiciled resident of the project area, but has established permanent residence, with the intent to remain indefinitely, within 65 road miles of the project, or for a highway project, the mid-point of the project.

**8 AAC 30.054. Per diem instead of board and lodging.** (a) A contractor may pay a laborer, mechanic, or field surveyor per diem instead of providing board and lodging, when the following conditions are met:

(1) the department determines that per diem instead of board and lodging is an established practice for the work classification; the department shall publish and periodically revise its determinations in the pamphlet *Laborers and Mechanics Minimum Rates of Pay*;

(2) the contractor pays each laborer, mechanic, or field surveyor the appropriate per diem rate as published and periodically revised in the pamphlet *Laborers and Mechanics Minimum Rates of Pay*; and

(3) the contractor pays the per diem to each laborer, mechanic, or field surveyor on the same day that wages are paid.

(b) A contractor may not pay per diem instead of board and lodging on a highway project located

- (1) west of Livengood on the Elliot Highway, AK-2;
- (2) on the Dalton Highway, AK-11;
- (3) north of milepost 20 on the Taylor Highway, AK-5;
- (4) east of Chicken on the Top of the World Highway; or
- (5) south of Tetlin Junction to the Alaska-Canada border on the Alaska Highway, AK-2.

**8 AAC 30.056. Alternative arrangement.** Upon a contractor’s written request, the commissioner may approve an alternative board and lodging or per diem arrangement, provided

- (1) the arrangement does not reduce the laborer, mechanic, or field surveyor’s wages below the prevailing wage rate; and
- (2) the laborer, mechanic, or field surveyor voluntarily enters into and signs the written arrangement; a labor organization representing laborers, mechanics, or field surveyors may enter into the written agreement on their behalf.

**8 AAC 30.900. General definitions** (selected excerpts only):

In this chapter and in AS 36

(22) “domiciled resident” means a person living within 65 road miles of a public construction project, or in the case of a highway project, the mid-point of the project, for at least 12 consecutive months prior to the award of the public construction project;

(23) “employed on the project” means the time period from the date the laborer, mechanic, or field surveyor first reports on-site to the project through the final date the person reports on-site to the project.

## **ADDITIONAL INFORMATION**

### **PER DIEM**

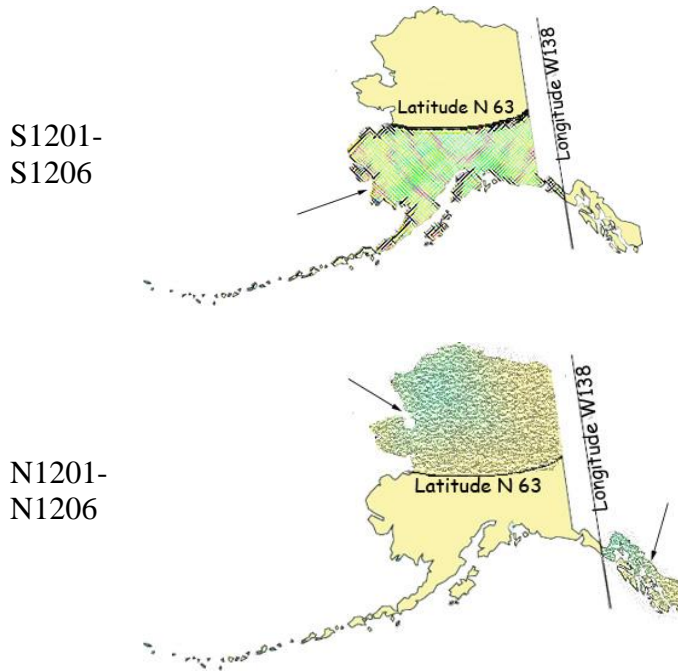
**Notice:** New regulations relating to board and lodging and per diem went into effect on November 25, 2018. The regulations provide a comprehensive set of requirements for the provision of board and lodging or per diem for workers on remote projects. Please refer to Alaska Administrative Code 8 AAC Chapter 30 and read the chapter carefully.

The Alaska Department of Labor and Workforce Development has determined that per diem is an established work practice for certain work classifications. These classifications are indicated throughout the Pamphlet by an asterisk (\*) under the classification title. If all of the conditions of 8 AAC 30.054 are met, an employer may pay workers in these classifications per diem instead of providing board and lodging on a remote project.

**Per Diem Rate:** As of May 1<sup>st</sup>, 2019, the minimum per diem rate is \$100.00 per day, or part thereof, the worker is employed on the project. In the event that a contractor provides lodging facilities, but no meals, the department will accept a payment of \$48 per day for meals to meet the per diem requirements.

**LABORER CLASSIFICATION CLARIFICATION**

The laborer rates categorized in class code S1201-S1206 apply in one area of Alaska; the area that is south of N63 latitude and west of W138 Longitude. The laborer rates categorized in class code N1201-N1206 apply in two areas of Alaska; the Alaska areas north of N63 latitude and east of W138 longitude. The following graphic representations should assist with clarifying the applicable wage rate categories:



**APPRENTICE RATES**

Apprentice rates at less than the minimum prevailing rates may be paid to apprentices according to an apprentice program which has been registered and approved by the Commissioner of the Alaska Department of Labor and Workforce Development in writing or according to a bona fide apprenticeship program registered with the U.S. Department of Labor, Office of Apprenticeship Training. **Any employee listed on a payroll at an apprentice wage rate who is not registered as above shall be paid the journeyman prevailing minimum wage in that work classification.** Wage rates are based on prevailing crew makeup practices in Alaska and apply to work performed regardless of either the quality of the work performed by the employee or the titles or classifications which may be assigned to individual employees.

**FRINGE BENEFIT PLANS**

Contractors/subcontractors may compensate fringe benefits to their employees in any one of three methods. The fringe benefits may be paid into a union trust fund, into an approved benefit plan, or paid directly on the paycheck as gross wages.

Where fringe benefits are paid into approved plans, funds, or programs including union trust funds, the payments must be contributed at least monthly. If contractors submit their own payroll forms and are paying fringe benefits into approved plans, funds, or programs, the employer’s certification must include, in addition to those requirements of 8 AAC 30.020(c), a statement that fringe benefit payments have been or will be paid at least monthly. Contractors who pay fringe benefits to a plan must ensure the plan is one approved by the Internal Revenue Service and that the plan meets the requirements of 8 AAC 30.025 (eff. 3/2/08) in order for payments to be credited toward the prevailing wage obligation.

**SPECIAL PREVAILING WAGE RATE DETERMINATION**

Special prevailing wage rate determinations may be requested for special projects or a special worker classification if the work to be performed does not conform to traditional public construction for which a prevailing wage rate has been established under 8 AAC 30.050(a) of this section. Requests for special wage rate determinations must be in writing and filed with the Commissioner at least 30 days before the award of the contract. An applicant for a special wage rate determination shall have the responsibility to support the necessity for the special rate. An application for a special wage rate determination filed under this section must contain:

- (1) a specification of the contract or project on which the special rates will apply and a description of the work to be performed;
- (2) a brief narrative explaining why special wage rates are necessary;
- (3) the job class or classes involved;
- (4) the special wage rates the applicant is requesting, including survey or other relevant wage data to support the requested rates;
- (5) the approximate number of employees who would be affected; and
- (6) any other information which might be helpful in determining if special wage rates are appropriate.

Requests made pursuant to the above should be addressed to:

Director  
Alaska Department of Labor and Workforce Development  
Labor Standards and Safety Division  
Wage and Hour  
P.O. Box 111149  
Juneau, AK 99811-1149

-or-

Email: [statewide.wagehour@alaska.gov](mailto:statewide.wagehour@alaska.gov)

**EMPLOYMENT PREFERENCE INFORMATION**

In October 2019, the Alaska Attorney General issued a formal opinion stating that the Alaska Statutes 36.10.150 of the State’s 90% Employment Preference law, also known as the Alaska Resident Hire law, violates both the U.S. and Alaska Constitutions. As a result, the state has stopped all enforcement activity. A copy of the Attorney General opinion is found here:

[http://law.alaska.gov/pdf/opinions/opinions\\_2019/19-005\\_AK-hire.pdf](http://law.alaska.gov/pdf/opinions/opinions_2019/19-005_AK-hire.pdf)

**Alaska Department of Labor and Workforce Development  
Labor Standards and Safety Division  
Wage and Hour**

Web site: <http://labor.state.ak.us/lss/pamp600.htm>

**Anchorage**

1251 Muldoon Road, Suite 113  
Anchorage, Alaska 99504-2098  
Phone: (907) 269-4900

Email:  
statewide.wagehour@alaska.gov

**Juneau**

PO Box 111149  
Juneau, Alaska 99811  
Phone: (907) 465-4842

Email:  
statewide.wagehour@alaska.gov

**Fairbanks**

Regional State Office Building  
675 7<sup>th</sup> Ave., Station J-1  
Fairbanks, Alaska 99701-4593  
Phone: (907) 451-2886

Email:  
statewide.wagehour@alaska.gov

**LABOR STANDARDS AND SAFETY NOTICE REQUESTS**

If you would like to receive Wage and Hour or Mechanical Inspection **regulation notices** or **publications information**, they are available via electronic mail, by signing up in the GovDelivery System, <https://public.govdelivery.com/accounts/AKDOL/subscriber/new> and selecting topics *LSS – Wage and Hour – Forms and Publications*, *LSS – Mechanical Inspection Regulations*, or *LSS – Wage and Hour Regulations*.

*Publications* are also available online at <http://labor.alaska.gov/lss/home.htm>

**DEBARMENT LIST**

**AS 36.05.090(b)** states that “the state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees.”

A person appearing on the following debarment list and a firm, corporation, partnership, or association in which the person has an interest may not work as a contractor or subcontractor on a public construction contract for the state or a political subdivision of the state for three years from the date of debarment.

Company Name

Debarment Expires

No companies are currently debarred.

# Laborers' & Mechanics' Minimum Rates of Pay

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other Benefits	THR
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## Boilermakers

\*See per diem note on last page

<b>A0101</b>	Boilermaker (journeyman)	48.15	8.57	18.40	2.15	VAC 4.25 SAF 0.34	81.86
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## Bricklayers & Blocklayers

\*See per diem note on last page

<b>A0201</b>	Blocklayer	42.01	9.00	10.20	0.62	L&M 0.20	62.03
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Bricklayer  
Marble or Stone Mason  
Refractory Worker (Firebrick, Plastic, Castable, and Gunitite Refractory Applications)  
Terrazzo Worker  
Tile Setter

<b>A0202</b>	Tuck Pointer Caulker	42.01	9.00	10.20	0.62	L&M 0.20	62.03
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Cleaner (PCC)

<b>A0203</b>	Marble & Tile Finisher	35.84	9.00	10.20	0.62	L&M 0.20	55.86
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Terrazzo Finisher

<b>A0204</b>	Torginal Applicator	35.84	9.00	10.20	0.62	L&M 0.20	55.86
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## Carpenters, Region I (North of 63 latitude)

\*See per diem note on last page

<b>N0301</b>	Carpenter (journeyman)	43.34	10.35	15.82	1.75	L&M 0.20 SAF 0.20	71.66
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Lather/Drywall/Acoustical

## Carpenters, Region II (South of N63 latitude)

\*See per diem note on last page

<b>S0301</b>	Carpenter (journeyman)	43.34	10.35	16.36	1.75	L&M 0.20 SAF 0.20	72.20
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Lather/Drywall/Acoustical

## Cement Masons

\*See per diem note on last page

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation



**Cement Masons**  
 \*See per diem note on last page

<b>A0401</b>	Group I, including:	44.43	8.80	11.80	1.53		<b>L&amp;M</b> 0.10	66.66
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- Application of Sealing Compound
- Application of Underlayment
- Building, General
- Cement Finisher
- Cement Mason (journeyman)
- Concrete
- Concrete Paving
- Concrete Polishing
- Concrete Repair
- Curb & Gutter, Sidewalk
- Curing of All Concrete
- General Concrete Pour Tender
- Grouting & Caulking of Tilt-Up Panels
- Grouting of All Plates
- Patching Concrete
- Screed Pin Setter
- Screeder or Rodder
- Spackling/Skim Coating

<b>A0402</b>	Group II, including:	44.43	8.80	11.80	1.53		<b>L&amp;M</b> 0.10	66.66
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- Form Setter

<b>A0403</b>	Group III, including:	44.43	8.80	11.80	1.53		<b>L&amp;M</b> 0.10	66.66
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- Concrete Saw Cutter Operator (All Control Joints and Self-powered)
- Curb & Gutter Machine
- Floor Grinder
- Pneumatic Power Tools
- Power Chipping & Bushing
- Sand Blasting Architectural Finish
- Screed & Rodding Machine Operator
- Troweling Machine Operator (all concrete surfaces)

<b>A0404</b>	Group IV, including:	44.43	8.80	11.80	1.53		<b>L&amp;M</b> 0.10	66.66
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- Acoustical or Imitation Acoustical Finish
- Application of All Composition Mastic
- Application of All Epoxy Material
- Application of All Plastic Material
- Finish Colored Concrete
- Gunite Nozzleman
- Hand Powered Grinder

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Cement Masons**  
\*See per diem note on last page

<b>A0404</b>	Group IV, including:	44.43	8.80	11.80	1.53		<b>L&amp;M</b> 0.10	66.66
	Preparing, scratching and browsing of all ceilings and walls, finished with terrazo or tile							
	Tunnel Worker							

<b>A0405</b>	Group V, including:	44.43	8.80	11.80	1.53		<b>L&amp;M</b> 0.10	66.66
	Casting and finishing							
	EIFS Systems							
	Finishing of all interior and exterior plastering							
	Fireproofing (Pryocrete, Cafco, Albi-Clad, sprayed fiberglass)							
	Gypsum, Portland Cement							
	Kindred material and products							
	Operation and control of all types of plastering machines, including power tools and floats, used by the industry							
	Overcoating and maintenance of interior/exterior plaster surfaces							
	Plasterer							
	Veneer plastering process (Rapid Plaster, U.S.G. "Imperial Systems", and Pabcoat Systems")							
	Venetian plaster and color-integrated Italian/Middle-Eastern line plaster							

**Culinary Workers**

<b>A0501</b>	Baker/Cook	29.95	7.53	8.68			<b>LEG</b>	46.16
<b>A0503</b>	General Helper	25.82	7.53	8.68			<b>LEG</b>	42.03
	Housekeeper							
	Janitor							
	Kitchen Helper							
<b>A0504</b>	Head Cook	29.95	7.53	8.68			<b>LEG</b>	46.16
<b>A0505</b>	Head Housekeeper	26.20	7.53	8.68			<b>LEG</b>	42.41
	Head Kitchen Help							

**Dredgemen**  
\*See per diem note on last page

<b>A0601</b>	Assistant Engineer	46.91	11.40	14.75	1.00		<b>L&amp;M</b> 0.10	0.05	74.21
	Craneman								

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Dredgemen**  
\*See per diem note on last page

<b>A0601</b>	Assistant Engineer	46.91	11.40	14.75	1.00	<b>L&amp;M</b>		74.21
	Electrical Generator Operator (primary pump/power barge/dredge)					0.10	0.05	
	Engineer							
	Welder							
<b>A0602</b>	Assistant Mate (deckhand)	45.65	11.40	14.75	1.00	<b>L&amp;M</b>		72.95
						0.10	0.05	
<b>A0603</b>	Fireman	46.13	11.40	14.75	1.00	<b>L&amp;M</b>		73.43
						0.10	0.05	
<b>A0605</b>	Leverman Clamshell	49.64	11.40	14.75	1.00	<b>L&amp;M</b>		76.94
						0.10	0.05	
<b>A0606</b>	Leverman Hydraulic	47.74	11.40	14.75	1.00	<b>L&amp;M</b>		75.04
						0.10	0.05	
<b>A0607</b>	Mate & Boatman	46.91	11.40	14.75	1.00	<b>L&amp;M</b>		74.21
						0.10	0.05	
<b>A0608</b>	Oiler (dredge)	46.13	11.40	14.75	1.00	<b>L&amp;M</b>		73.43
						0.10	0.05	

**Electricians**  
\*See per diem note on last page

<b>A0701</b>	Inside Cable Splicer	44.44	14.40	14.22	0.95	<b>L&amp;M</b>		<b>LEG</b>	74.41
						0.25	0.15		
<b>A0702</b>	Inside Journeyman Wireman, including:	44.44	14.40	14.22	0.95	<b>L&amp;M</b>		<b>LEG</b>	74.41
	Technicians (including use of drones in electrical construction)					0.25	0.15		
<b>A0703</b>	Power Cable Splicer	65.19	14.40	19.15	0.95	<b>L&amp;M</b>		<b>LEG</b>	100.09
						0.25	0.15		
<b>A0704</b>	Tele Com Cable Splicer	52.53	14.40	17.98	0.95	<b>L&amp;M</b>		<b>LEG</b>	86.26
						0.25	0.15		
<b>A0705</b>	Power Journeyman Lineman, including:	63.44	14.40	19.09	0.95	<b>L&amp;M</b>		<b>LEG</b>	98.28
	Power Equipment Operator					0.25	0.15		
	Technician (including use of drones in electrical construction)								
<b>A0706</b>	Tele Com Journeyman Lineman, including:	50.78	14.40	17.92	0.95	<b>L&amp;M</b>		<b>LEG</b>	84.45
	Technician (including use of drones in telecommunications construction)					0.25	0.15		
	Tele Com Equipment Operator								

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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Electricians**  
\*See per diem note on last page

<b>A0707</b>	Straight Line Installer - Repairman	50.78	14.40	17.92	0.95	<b>L&amp;M</b>	<b>LEG</b>	84.45
<b>A0708</b>	Powderman	61.44	14.40	19.03	0.95	<b>L&amp;M</b>	<b>LEG</b>	96.22
<b>A0710</b>	Material Handler	28.07	14.02	5.84	0.15	<b>L&amp;M</b>	<b>LEG</b>	48.38
<b>A0712</b>	Tree Trimmer Groundman	31.78	14.40	14.30	0.15	<b>L&amp;M</b>	<b>LEG</b>	60.93
<b>A0713</b>	Journeyman Tree Trimmer	40.71	14.40	14.57	0.15	<b>L&amp;M</b>	<b>LEG</b>	70.13
<b>A0714</b>	Vegetation Control Sprayer	44.26	14.40	14.68	0.15	<b>L&amp;M</b>	<b>LEG</b>	73.79
<b>A0715</b>	Inside Journeyman Communications CO/PBX	44.44	14.40	14.22	0.95	<b>L&amp;M</b>	<b>LEG</b>	74.41

**Elevator Workers**  
\*See per diem note on last page

<b>A0802</b>	Elevator Constructor	46.08	16.07	20.56	0.70	<b>L&amp;M</b>	<b>VAC</b>	89.52
<b>A0803</b>	Elevator Constructor Mechanic	65.83	16.07	20.56	0.70	<b>L&amp;M</b>	<b>VAC</b>	111.46

**Heat & Frost Insulators/Asbestos Workers**  
\*See per diem note on last page

<b>A0902</b>	Asbestos Abatement-Mechanical Systems	41.35	9.24	11.12	1.50	<b>IAF</b>	<b>LML</b>	63.40
<b>A0903</b>	Asbestos Abatement/General Demolition All Systems	41.35	9.24	11.12	1.50	<b>IAF</b>	<b>LML</b>	63.40
<b>A0904</b>	Insulator, Group II	41.35	9.24	11.12	1.50	<b>IAF</b>	<b>LML</b>	63.40
<b>A0905</b>	Fire Stop	41.35	9.24	11.12	1.50	<b>IAF</b>	<b>LML</b>	63.40

**IronWorkers**  
\*See per diem note on last page

<b>A1101</b>	Ironworkers, including:	41.49	9.91	24.95	0.77	<b>L&amp;M</b>	<b>IAF</b>	77.56
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**IronWorkers**  
 \*See per diem note on last page

						L&M	IAF	
<b>A1101</b>	Ironworkers, including:	41.49	9.91	24.95	0.77	0.20	0.24	77.56
	Bender Operators							
	Bridge & Structural							
	Hangar Doors							
	Hollow Metal Doors							
	Industrial Doors							
	Machinery Mover							
	Ornamental							
	Reinforcing							
	Rigger							
	Sheeter							
	Signalman							
	Stage Rigger							
	Toxic Haz-Mat Work							
	Welder							

						L&M	IAF	
<b>A1102</b>	Helicopter	42.49	9.91	24.95	0.77	0.20	0.24	78.56
	Helicopter (used for rigging and setting)							
	Tower (energy producing windmill type towers to include nacelle and blades)							

						L&M	IAF	
<b>A1103</b>	Fence/Barrier Installer	37.99	9.91	24.95	0.77	0.20	0.24	74.06

						L&M	IAF	
<b>A1104</b>	Guard Rail Layout Man	38.73	9.91	24.95	0.77	0.20	0.24	74.80

						L&M	IAF	
<b>A1105</b>	Guard Rail Installer	38.99	9.91	24.95	0.77	0.20	0.24	75.06

**Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)**  
 \*See per diem note on last page

						L&M	LEG	
<b>N1201</b>	Group I, including:	36.00	9.55	21.16	1.65	0.30	0.20	68.86
	Asphalt Worker (shovelman, plant crew)							
	Brush Cutter							
	Camp Maintenance Laborer							
	Carpenter Tender or Helper							
	Choke Setter, Hook Tender, Rigger, Signalman							
	Concrete Labor (curb & gutter, chute handler, curing, grouting, screeding)							
	Crusher Plant Laborer							
	Demolition Laborer							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)**  
 \*See per diem note on last page

<b>N1201</b>	Group I, including:	36.00	9.55	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	68.86
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- Ditch Digger
- Dumpman
- Environmental Laborer (hazard/toxic waste, oil spill)
- Fence Installer
- Fire Watch Laborer
- Flagman
- Form Stripper
- General Laborer
- Guardrail Laborer, Bridge Rail Installer
- Hydro Seeder Nozzleman
- Laborer, Building
- Landscaper or Planter
- Laying of Mortarless Decorative Block (retaining walls, flowered decorative block 4 feet or less - highway or landscape work)
- Material Handler
- Pneumatic or Power Tools
- Portable or Chemical Toilet Serviceman
- Pump Man or Mixer Man
- Railroad Track Laborer
- Sandblast, Pot Tender
- Saw Tender
- Slurry Work
- Steam Cleaner Operator
- Steam Point or Water Jet Operator
- Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)
- Tank Cleaning
- Utiliwalk & Utilidor Laborer
- Watchman (construction projects)
- Window Cleaner

<b>N1202</b>	Group II, including:	37.00	9.55	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	69.86
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- Burning & Cutting Torch
- Cement or Lime Dumper or Handler (sack or bulk)
- Certified Erosion Sediment Control Lead (CESCL Laborer)
- Choker Splicer
- Chucktender (wagon, air-track & hydraulic drills)
- Concrete Laborer (power buggy, concrete saws, pumpcrete nozzleman, vibratorman)
- Culvert Pipe Laborer
- Cured Inplace Pipelayer

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**Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)**  
 \*See per diem note on last page

<b>N1202</b> Group II, including:	37.00	9.55	21.16	1.65	<b>L&amp;M</b> 0.30	<b>LEG</b> 0.20	69.86
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- Environmental Laborer (asbestos, marine work)
- Floor Preparation, Core Drilling
- Foam Gun or Foam Machine Operator
- Green Cutter (dam work)
- Gunite Operator
- Hod Carrier
- Jackhammer/Chipping Gun or Pavement Breaker
- Laser Instrument Operator
- Laying of Mortarless Decorative Block (retaining walls, flowered decorative block over 4 feet - highway or landscape work)
- Mason Tender & Mud Mixer (sewer work)
- Pilot Car
- Pipelayer Helper
- Plasterer, Bricklayer & Cement Finisher Tender
- Powderman Helper
- Power Saw Operator
- Railroad Switch Layout Laborer
- Sandblaster
- Scaffold Building & Erecting
- Sewer Caulker
- Sewer Plant Maintenance Man
- Thermal Plastic Applicator
- Timber Faller, Chainsaw Operator, Filer
- Timberman

<b>N1203</b> Group III, including:	37.90	9.55	21.16	1.65	<b>L&amp;M</b> 0.30	<b>LEG</b> 0.20	70.76
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- Bit Grinder
- Camera/Tool/Video Operator
- Guardrail Machine Operator
- High Rigger & Tree Topper
- High Scaler
- Multiplate
- Plastic Welding
- Slurry Seal Squeegee Man
- Traffic Control Supervisor
- Welding Certified (in connection with laborer's work)

<b>N1204</b> Group IIIA	41.78	9.55	21.16	1.65	<b>L&amp;M</b> 0.30	<b>LEG</b> 0.20	74.64
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- Asphalt Raker, Asphalt Belly Dump Lay Down
- Drill Doctor (in the field)

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**Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)**

\*See per diem note on last page

						L&M	LEG	
<b>N1204</b>	Group IIIA	41.78	9.55	21.16	1.65	0.30	0.20	74.64

- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)
- Pioneer Drilling & Drilling Off Tugger (all type drills)
- Pipelayers
- Powderman (Employee Possessor)
- Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)
- Traffic Control Supervisor, DOT Qualified

						L&M	LEG	
<b>N1205</b>	Group IV	25.57	9.55	21.16	1.65	0.30	0.20	58.43

- Final Building Cleanup
- Permanent Yard Worker

						L&M	LEG	
<b>N1206</b>	Group IIIB	47.36	5.50	21.16	1.65	0.30	0.20	76.17

- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours)
- Federal Powderman (Responsible Person in Charge)
- Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones)
- Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours)
- Stake Hopper

**Laborers (The area that is south of N63 latitude and west of W138 longitude)**

\*See per diem note on last page

						L&M	LEG	
<b>S1201</b>	Group I, including:	36.00	9.55	21.16	1.65	0.30	0.20	68.86

- Asphalt Worker (shovelman, plant crew)
- Brush Cutter
- Camp Maintenance Laborer
- Carpenter Tender or Helper
- Choke Setter, Hook Tender, Rigger, Signalman
- Concrete Labor (curb & gutter, chute handler, curing, grouting, screeding)
- Crusher Plant Laborer
- Demolition Laborer
- Ditch Digger
- Dumpman
- Environmental Laborer (hazard/toxic waste, oil spill)
- Fence Installer
- Fire Watch Laborer
- Flagman

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**Laborers (The area that is south of N63 latitude and west of W138 longitude)**

\*See per diem note on last page

						<b>L&amp;M</b>	<b>LEG</b>	
<b>S1201</b>	Group I, including:	36.00	9.55	21.16	1.65	0.30	0.20	68.86

- Form Stripper
- General Laborer
- Guardrail Laborer, Bridge Rail Installer
- Hydro Seeder Nozzleman
- Laborer, Building
- Landscaper or Planter
- Laying of Mortarless Decorative Block (retaining walls, flowered decorative block 4 feet or less - highway or landscape work)
- Material Handler
- Pneumatic or Power Tools
- Portable or Chemical Toilet Serviceman
- Pump Man or Mixer Man
- Railroad Track Laborer
- Sandblast, Pot Tender
- Saw Tender
- Slurry Work
- Steam Cleaner Operator
- Steam Point or Water Jet Operator
- Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)
- Tank Cleaning
- Utiliwalk & Utilidor Laborer
- Watchman (construction projects)
- Window Cleaner

						<b>L&amp;M</b>	<b>LEG</b>	
<b>S1202</b>	Group II, including:	37.00	9.55	21.16	1.65	0.30	0.20	69.86

- Burning & Cutting Torch
- Cement or Lime Dumper or Handler (sack or bulk)
- Certified Erosion Sediment Control Lead (CESCL Laborer)
- Choker Splicer
- Chucktender (wagon, air-track & hydraulic drills)
- Concrete Laborer (power buggy, concrete saws, pumpcrete nozzleman, vibratorman)
- Culvert Pipe Laborer
- Cured Inplace Pipelayer
- Environmental Laborer (asbestos, marine work)
- Floor Preparation, Core Drilling
- Foam Gun or Foam Machine Operator
- Green Cutter (dam work)
- Gunite Operator
- Hod Carrier

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Laborers (The area that is south of N63 latitude and west of W138 longitude)**

\*See per diem note on last page

						<b>L&amp;M</b>	<b>LEG</b>	
<b>S1202</b>	Group II, including:	37.00	9.55	21.16	1.65	0.30	0.20	69.86

- Jackhammer/Chipping Gun or Pavement Breaker
- Laser Instrument Operator
- Laying of Mortarless Decorative Block (retaining walls, flowered decorative block over 4 feet - highway or landscape work)
- Mason Tender & Mud Mixer (sewer work)
- Pilot Car
- Pipelayer Helper
- Plasterer, Bricklayer & Cement Finisher Tender
- Powderman Helper
- Power Saw Operator
- Railroad Switch Layout Laborer
- Sandblaster
- Scaffold Building & Erecting
- Sewer Caulker
- Sewer Plant Maintenance Man
- Thermal Plastic Applicator
- Timber Faller, Chainsaw Operator, Filer
- Timberman

						<b>L&amp;M</b>	<b>LEG</b>	
<b>S1203</b>	Group III, including:	37.90	9.55	21.16	1.65	0.30	0.20	70.76

- Bit Grinder
- Camera/Tool/Video Operator
- Guardrail Machine Operator
- High Rigger & Tree Topper
- High Scaler
- Multiplate
- Plastic Welding
- Slurry Seal Squeegee Man
- Traffic Control Supervisor
- Welding Certified (in connection with laborer's work)

						<b>L&amp;M</b>	<b>LEG</b>	
<b>S1204</b>	Group IIIA	41.78	9.55	21.16	1.65	0.30	0.20	74.64

- Asphalt Raker, Asphalt Belly Dump Lay Down
- Drill Doctor (in the field)
- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)
- Pioneer Drilling & Drilling Off Tugger (all type drills)
- Pipelayers
- Powderman (Employee Possessor)
- Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Laborers (The area that is south of N63 latitude and west of W138 longitude)**

\*See per diem note on last page

<b>S1204</b>	Group IIIA	41.78	9.55	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	74.64
	Traffic Control Supervisor, DOT Qualified					0.30	0.20	
<b>S1205</b>	Group IV	25.57	9.55	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	58.43
	Final Building Cleanup Permanent Yard Worker					0.30	0.20	
<b>S1206</b>	Group IIIB	47.36	5.50	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	76.17
	Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours) Federal Powderman (Responsible Person in Charge) Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones) Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours) Stake Hopper					0.30	0.20	

**Millwrights**

\*See per diem note on last page

<b>A1251</b>	Millwright (journeyman)	46.48	10.35	12.87	1.10	<b>L&amp;M</b>		71.25
						0.40	0.05	
<b>A1252</b>	Millwright Welder	47.48	10.35	12.87	1.10	<b>L&amp;M</b>		72.25
						0.40	0.05	

**Painters, Region I (North of N63 latitude)**

\*See per diem note on last page

<b>N1301</b>	Group I, including:	36.08	9.27	15.10	1.08	<b>L&amp;M</b>		61.60
	Brush General Painter Hand Taping Hazardous Material Handler Lead-Based Paint Abatement Roll					0.07		
<b>N1302</b>	Group II, including:	36.60	9.27	15.10	1.08	<b>L&amp;M</b>		62.12
	Bridge Painter Epoxy Applicator General Drywall Finisher Hand/Spray Texturing Industrial Coatings Specialist					0.07		

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Painters, Region I (North of N63 latitude)**

\*See per diem note on last page

						L&M	
<b>N1302</b>	Group II, including:	36.60	9.27	15.10	1.08	0.07	62.12
	Machine/Automatic Taping						
	Pot Tender						
	Sandblasting						
	Specialty Painter						
	Spray						
	Structural Steel Painter						
	Wallpaper/Vinyl Hanger						

<b>N1304</b>	Group IV, including:	42.74	9.27	18.21	1.05	0.05	71.32
	Glazier						
	Storefront/Automatic Door Mechanic						

<b>N1305</b>	Group V, including:	39.86	9.27	5.00	1.10	0.10	55.33
	Carpet Installer						
	Floor Coverer						
	Heat Weld/Cove Base						
	Linoleum/Soft Tile Installer						

<b>N1306</b>	Group VI, including:	50.44	10.23	5.00	1.10	0.10	66.87
	Traffic Control Striper						

**Painters, Region II (South of N63 latitude)**

\*See per diem note on last page

						L&M	
<b>S1301</b>	Group I, including :	33.22	9.27	15.95	1.08	0.07	59.59
	Brush						
	General Painter						
	Hand Taping						
	Hazardous Material Handler						
	Lead-Based Paint Abatement						
	Roll						
	Spray						

						L&M	
<b>S1302</b>	Group II, including :	34.47	9.27	15.95	1.08	0.07	60.84
	General Drywall Finisher						
	Hand/Spray Texturing						
	Machine/Automatic Taping						
	Wallpaper/Vinyl Hanger						

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Painters, Region II (South of N63 latitude)**

\*See per diem note on last page

<b>S1303</b>	Group III, including :	34.57	9.27	15.95	1.08		<b>L&amp;M</b> 0.07	60.94
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- Bridge Painter
- Epoxy Applicator
- Industrial Coatings Specialist
- Pot Tender
- Sandblasting
- Specialty Painter
- Structural Steel Painter

<b>S1304</b>	Group IV, including:	42.95	9.27	17.25	1.08		<b>L&amp;M</b> 0.07	70.62
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- Glazier
- Storefront/Automatic Door Mechanic

<b>S1305</b>	Group V, including:	39.86	9.27	5.00	1.10		<b>L&amp;M</b> 0.10	55.33
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- Carpet Installer
- Floor Coverer
- Heat Weld/Cove Base
- Linoleum/Soft Tile Installer

<b>S1306</b>	Group VI, including:	50.44	10.23	5.00	1.10		0.10	66.87
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- Traffic Control Striper

**Piledrivers**

\*See per diem note on last page

<b>A1401</b>	Piledriver	43.34	10.35	15.82	1.75		<b>L&amp;M</b> 0.20	<b>IAF</b> 0.20	71.66
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- Assistant Dive Tender
- Carpenter/Piledriver
- Rigger
- Sheet Stabber
- Skiff Operator

<b>A1402</b>	Piledriver-Welder/Toxic Worker	44.34	10.35	15.82	1.75		<b>L&amp;M</b> 0.20	<b>IAF</b> 0.20	72.66
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<b>A1403</b>	Remotely Operated Vehicle Pilot/Technician	47.65	10.35	15.82	1.75		<b>L&amp;M</b> 0.20	<b>IAF</b> 0.20	75.97
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- Single Atmosphere Suit, Bell or Submersible Pilot

<b>A1404</b>	Diver (working) **See note on last page	87.45	10.35	15.82	1.75		<b>L&amp;M</b> 0.20	<b>IAF</b> 0.20	115.77
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Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Piledrivers**  
\*See per diem note on last page

<b>A1405</b>	Diver (standby) **See note on last page	47.65	10.35	15.82	1.75	L&M	IAF	75.97
<b>A1406</b>	Dive Tender **See note on last page	46.65	10.35	15.82	1.75	L&M	IAF	74.97
<b>A1407</b>	Welder (American Welding Society, Certified Welding Inspector)	48.90	10.35	15.82	1.75	L&M	IAF	77.22

**Plumbers, Region I (North of N63 latitude)**  
\*See per diem note on last page

<b>N1501</b>	Journeyman Pipefitter	46.06	11.75	17.45	1.50	L&M	S&L	77.51
	Plumber							
	Welder							

**Plumbers, Region II (South of N63 latitude)**  
\*See per diem note on last page

<b>S1501</b>	Journeyman Pipefitter	41.00	11.88	15.27	1.55	L&M		69.90
	Plumber							
	Welder							

**Plumbers, Region IIA (1st Judicial District)**  
\*See per diem note on last page

<b>X1501</b>	Journeyman Pipefitter	41.50	13.67	11.75	2.70	L&M		69.86
	Plumber							
	Welder							

**Power Equipment Operators**  
\*See per diem note on last page

<b>A1601</b>	Group I, including:	47.74	11.40	14.75	1.00	L&M		75.04
	Asphalt Roller: Breakdown, Intermediate, and Finish							
	Back Filler							
	Barrier Machine (Zipper)							
	Belcrete with Power Pack & similar conveyors							
	Bending Machine							
	Boat Coxswain							
	Bulldozer							
	Cableways, Highlines & Cablecars							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Power Equipment Operators**

\*See per diem note on last page

	<b>L&amp;M</b>						
<b>A1601</b> Group I, including:	47.74	11.40	14.75	1.00	0.10	0.05	75.04
Cleaning Machine							
Coating Machine							
Concrete Hydro Blaster							
Cranes (45 tons & under or 150 feet of boom & under (including jib & attachments))							
(a) Hydralifts or Transporters, (all track or truck type)							
(b) Derricks							
(c) Overhead							
Crushers							
Deck Winches, Double Drum							
Ditching or Trenching Machine (16 inch or over)							
Drag Scraper, Yarder, and similar types							
Drilling Machines, Core, Cable, Rotary and Exploration							
Finishing Machine Operator, Concrete Paving, Laser Screed, Sidewalk, Curb & Gutter Machine							
Grade Checker and/or Line and Grade including Drone							
Helicopters							
Hover Craft, Flex Craft, Loadmaster, Air Cushion, All-Terrain Vehicle, Rollagon, Bargecable, Nodwell, & Snow Cat							
Hydro Ax, Feller Buncher & similar							
Hydro Excavation (Vac-Truck and Similar)							
Loaders (2 1/2 yards through 5 yards, including all attachments):							
(a) Forklifts (with telescopic boom & swing attachment)							
(b) Front End & Overhead, (2-1/2 yards through 5 yards)							
(c) Loaders, (with forks or pipe clamp)							
(d) Loaders, (elevating belt type, Euclid & similar types)							
Material Transfer Vehicle (Elevating Grader, Pickup Machine, and similar types)							
Mechanic, Welder, Bodyman, Electrical, Camp & Maintenance Engineer							
Micro Tunneling Machine							
Mixers: Mobile type with hoist combination							
Motor Patrol Grader							
Mucking Machine: Mole, Tunnel Drill, Horizontal/Directional Drill Operator and/or Shield							
Off-Road Hauler (including Articulating and Haul Trucks)							
Operator on Dredges							
Piledriver Engineer, L.B. Foster, Puller or similar paving breaker							
Plant Operator (Asphalt & Concrete)							
Power Plant, Turbine Operator 200 k.w & over (power plants or combination of power units over 300 k.w.)							
Remote Controlled Equipment							
Scraper (through 40 yards)							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

<b>Power Equipment Operators</b>								
*See per diem note on last page								

		<b>L&amp;M</b>						
<b>A1601</b>	Group I, including:	47.74	11.40	14.75	1.00	0.10	0.05	75.04
	Service Oiler/Service Engineer							
	Shot Blast Machine							
	Shovels, Backhoes, Excavators with all attachments, and Gradealls (3 yards & under)							
	Sideboom (under 45 tons)							
	Sub Grader (Gurries & similar types)							
	Tack Tractor							
	Truck Mounted Concrete Pump, Conveyor/Tele-belt, & Creter							
	Wate Kote Machine							

		<b>L&amp;M</b>						
<b>A1602</b>	Group IA, including:	49.64	11.40	14.75	1.00	0.10	0.05	76.94
	Camera/Tool/Video Operator (Slipline)							
	Certified Welder, Electrical Mechanic, Camp Maintenance Engineer, Mechanic (over 10,000 hours)							
	Cranes (over 45 tons or 150 feet including jib & attachments)							
	(a) Clamshells & Draglines (over 3 yards)							
	(b) Tower Cranes							
	Licensed Water/Waste Water Treatment Operator							
	Loaders (over 5 yards)							
	Motor Patrol Grader, Dozer, Grade Tractor (finish: when finishing to final grade and/or to hubs, or for asphalt)							
	Power Plants (1000 k.w. & over)							
	Profiler, Reclaimer, and Roto-Mill							
	Quad							
	Scrapers (over 40 yards)							
	Screed							
	Shovels, Backhoes, Excavators with all attachments (over 3 yards)							
	Sidebooms (over 45 tons)							
	Slip Form Paver, C.M.I. & similar types							
	Topside (Asphalt Paver, Slurry machine, Spreaders, and similar types)							

		<b>L&amp;M</b>						
<b>A1603</b>	Group II, including:	46.91	11.40	14.75	1.00	0.10	0.05	74.21
	Boiler - Fireman							
	Cement Hogs & Concrete Pump Operator							
	Conveyors (except those listed in Group I)							
	Hoists on Steel Erection, Towermobiles & Air Tuggers							
	Horizontal/Directional Drill Locator							
	Locomotives, Rod & Geared Engines							
	Mixers							
	Screening, Washing Plant							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation



**Power Equipment Operators**  
 \*See per diem note on last page

						L&M		
<b>A1603</b>	Group II, including:	46.91	11.40	14.75	1.00	0.10	0.05	74.21
	Sideboom (cradling rock drill, regardless of size)							
	Skidder							
	Trenching Machines (under 16 inches)							
	Water/Waste Water Treatment Operator							

						L&M		
<b>A1604</b>	Group III, including:	46.13	11.40	14.75	1.00	0.10	0.05	73.43
	"A" Frame Trucks, Deck Winches							
	Bombardier (tack or tow rig)							
	Boring Machine							
	Brooms, Power (sweeper, elevator, vacuum, or similar)							
	Bump Cutter							
	Compressor							
	Farm Tractor							
	Forklift, Industrial Type							
	Gin Truck or Winch Truck (with poles when used for hoisting)							
	Hoists, Air Tuggers, Elevators							
	Loaders:							
	(a) Elevating-Athey, Barber Greene & similar types							
	(b) Forklifts or Lumber Carrier (on construction job sites)							
	(c) Forklifts, (with tower)							
	(d) Overhead & Front End, (under 2-1/2 yards)							
	Locomotives: Dinkey (air, steam, gas & electric) Speeders							
	Mechanics, Light Duty							
	Oil, Blower Distribution							
	Posthole Digger, Mechanical							
	Pot Fireman (power agitated)							
	Power Plant, Turbine Operator, (under 200 k.w.)							
	Pumps, Water							
	Roller (other than Asphalt)							
	Saws, Concrete							
	Skid Hustler							
	Skid Steer (with all attachments)							
	Stake Hopper							
	Straightening Machine							
	Tow Tractor							

						L&M		
<b>A1605</b>	Group IV, including:	39.42	11.40	14.75	1.00	0.10	0.05	66.72
	Crane Assistant Engineer/Rig Oiler							
	Drill Helper							
	Parts & Equipment Coordinator							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Power Equipment Operators**  
 \*See per diem note on last page

		L&M						
<b>A1605</b>	Group IV, including:	39.42	11.40	14.75	1.00	0.10	0.05	66.72
	Spotter							
	Steam Cleaner							
	Swamper (on trenching machines or shovel type equipment)							

**Roofers**  
 \*See per diem note on last page

		L&M						
<b>A1701</b>	Roofer & Waterproofer	47.62	13.75	3.91	0.81	0.10	0.06	66.25

		L&M						
<b>A1702</b>	Roofer Material Handler	34.23	13.75	3.91	0.81	0.10	0.06	52.86

**Sheet Metal Workers, Region I (North of N63 latitude)**  
 \*See per diem note on last page

		L&M						
<b>N1801</b>	Sheet Metal Journeyman	50.83	12.25	14.86	1.80	0.12		79.86
	Air Balancing and duct cleaning of HVAC systems							
	Brazing, soldering or welding of metals							
	Demolition of sheet metal HVAC systems							
	Fabrication and installation of exterior wall sheathing, siding, metal roofing, flashing, decking and architectural sheet metal work							
	Fabrication and installation of heating, ventilation and air conditioning ducts and equipment							
	Fabrication and installation of louvers and hoods							
	Fabrication and installation of sheet metal lagging							
	Fabrication and installation of stainless steel commercial or industrial food service equipment							
	HVAC-R Service Mechanic, servicing and maintaining HVAC-R Systems							
	Manufacture, fabrication assembly, installation and alteration of all ferrous and nonferrous metal work							
	Metal lavatory partitions							
	Preparation of drawings taken from architectural and engineering plans required for fabrication and erection of sheet metal work							
	Sheet Metal shelving							
	Sheet Metal venting, chimneys and breaching							
	Skylight installation							

**Sheet Metal Workers, Region II (South of N63 latitude)**  
 \*See per diem note on last page

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Sheet Metal Workers, Region II (South of N63 latitude)**

\*See per diem note on last page

							L&M	
<b>S1801</b>	Sheet Metal Journeyman	45.35	12.23	14.70	1.83	0.43		74.54
	Air Balancing and duct cleaning of HVAC systems							
	Brazing, soldering or welding of metals							
	Demolition of sheet metal HVAC systems							
	Fabrication and installation of exterior wall sheathing, siding, metal roofing, flashing, decking and architectural sheet metal work							
	Fabrication and installation of heating, ventilation and air conditioning ducts and equipment							
	Fabrication and installation of louvers and hoods							
	Fabrication and installation of sheet metal lagging							
	Fabrication and installation of stainless steel commercial or industrial food service equipment							
	HVAC-R Service Mechanic, servicing and maintaining HVAC-R Systems							
	Manufacture, fabrication assembly, installation and alteration of all ferrous and nonferrous metal work							
	Metal lavatory partitions							
	Preparation of drawings taken from architectural and engineering plans required for fabrication and erection of sheet metal work							
	Sheet Metal shelving							
	Sheet Metal venting, chimneys and breaching							
	Skylight installation							

**Sprinkler Fitters**

\*See per diem note on last page

							L&M	
<b>A1901</b>	Sprinkler Fitter	54.01	10.55	18.25	0.52	0.25		83.58

**Surveyors**

\*See per diem note on last page

							L&M	
<b>A2001</b>	Chief of Parties	54.50	12.48	13.64	1.20	0.10		81.92
<b>A2002</b>	Party Chief	50.69	12.48	13.64	1.20	0.10		78.11
<b>A2003</b>	Line & Grade Technician/Office Technician/GPS, Drones	47.94	12.48	13.64	1.20	0.10		75.36
<b>A2004</b>	Associate Party Chief (including Instrument Person & Head Chain Person)/Stake Hop/Grademan	45.69	12.48	13.64	1.20	0.10		73.11

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

Class Code	Classification of Laborers & Mechanics	BHR	H&W	PEN	TRN	Other	Benefits	THR
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**Surveyors**  
\*See per diem note on last page

<b>A2006</b>	Chain Person (for crews with more than 2 people)	41.09	12.48	13.64	1.20		<b>L&amp;M</b> 0.10	68.51
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**Truck Drivers**  
\*See per diem note on last page

<b>A2101</b>	Group I, including:	46.84	12.48	13.64	1.20		<b>L&amp;M</b> 0.10	74.26
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- Air/Sea Traffic Controllers
- Ambulance/Fire Truck Driver (EMT certified)
- Boat Coxswain
- Captains & Pilots (air & water)
- Deltas, Commanders, Rollagons, & similar equipment (when pulling sleds, trailers or similar equipment)
- Dump Trucks (including articulating end dumps, rockbuggy, side dump, belly dump, & trucks with pups) over 40 yards up to & including 60 yards
- Fueler
- Helicopter Transporter
- Liquid Vac Truck/Super Vac Truck
- Material Coordinator or Purchasing Agent
- Oil Distributor Truck
- Ready-mix (over 12 yards up to & including 15 yards) (over 15 yards to be negotiated)
- Semi with Double Box Mixer
- Tireman, Medium Duty (Truck Tires up to 1200-24")
- Water Wagon (250 Bbls and above)

<b>A2102</b>	Group 1A including:	48.19	12.48	13.64	1.20		<b>L&amp;M</b> 0.10	75.61
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- Dump Trucks (including rockbuggy, side dump, belly dump & trucks with pups) over 60 yards up to & including 100 yards (over 100 yards to be negotiated)
- Jeeps (driver under load)
- Lowboys, including tractor attached trailers & jeeps, up to & including 12 axles (over 12 axles or 150 tons to be negotiated)
- Tireman Heavy Duty (earthmover tires, i.e., loader, scraper, haul truck)

<b>A2103</b>	Group II, including:	45.51	12.48	13.64	1.20		<b>L&amp;M</b> 0.10	72.93
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- All Deltas, Commanders, Rollagons, & similar equipment
- Batch Trucks (8 yards & up)
- Batch Trucks (up to & including 7 yards)
- Boom Truck/Knuckle Truck (over 5 tons)
- Cacasco Truck/Heat Stress Truck
- Construction and Material Safety Technician

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Truck Drivers**  
 \*See per diem note on last page

<b>A2103</b> Group II, including:	45.51	12.48	13.64	1.20	<b>L&amp;M</b>		0.10	72.93
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- Dump Trucks (including articulating end dump, rockbuggy, side dump, belly dump, & trucks with pups) over 20 yards up to & including 40 yards
- Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame manufactured rating over 5 tons)
- Mechanics
- Partsman
- Ready-mix (up to & including 12 yards)
- Stringing Truck
- Turn-O-Wagon or DW-10 (not self loading)

<b>A2104</b> Group III, including:	44.64	12.48	13.64	1.20	<b>L&amp;M</b>		0.10	72.06
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- Boom Truck/Knuckle Truck (up to & including 5 tons)
- Dump Trucks (including articulating end dump, rockbuggy, side dump, belly dump, & trucks with pups) over 10 yards up to & including 20 yards
- Expeditor (electrical & pipefitting materials)
- Gin Pole Truck, Winch Truck, Wrecker (truck mounted "A" frame manufactured rating 5 tons & under)
- Greaser - Shop
- Semi or Truck & Trailer
- Thermal Plastic Layout Technician
- Traffic Control Technician
- Trucks/Jeeps (push or pull)

<b>A2105</b> Group IV, including:	44.02	12.48	13.64	1.20	<b>L&amp;M</b>		0.10	71.44
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- Air Cushion or similar type vehicle
- All Terrain Vehicle
- Buggymobile
- Bull Lift & Fork Lift, Fork Lift with Power Boom & Swing Attachment (over 5 tons)
- Bus Operator (over 30 passengers)
- Cement Spreader, Dry
- Combination Truck-Fuel & Grease
- Compactor (when pulled by rubber tired equipment)
- Dump Trucks (including rockbuggy, side dump, belly dump, & trucks with pups) up to & including 10 yards
- Dumpster
- Expeditor (general)
- Fire Truck/Ambulance Driver
- Flat Beds, Dual Rear Axle
- Foam Distributor Truck Dual Axle
- Front End Loader with Fork

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Truck Drivers**

\*See per diem note on last page

						<b>L&amp;M</b>	
<b>A2105</b>	Group IV, including:	44.02	12.48	13.64	1.20	0.10	71.44
	Grease Truck						
	Hydro Seeder, Dual Axle						
	Hyster Operators (handling bulk aggregate)						
	Loadmaster (air & water operations)						
	Lumber Carrier						
	Ready-mix, (up to & including 7 yards)						
	Rigger (air/water/oilfield)						
	Tireman, Light Duty						
	Track Truck Equipment						
	Truck Vacuum Sweeper						
	Warehouseperson						
	Water Truck (Below 250 Bbls)						
	Water Truck (straight)						
	Water Wagon, Semi						

						<b>L&amp;M</b>	
<b>A2106</b>	Group V, including:	43.22	12.48	13.64	1.20	0.10	70.64
	Buffer Truck						
	Bull Lifts & Fork Lifts, Fork Lifts with Power Boom & Swing Attachments (up to & including 5 tons)						
	Bus Operator (up to 30 passengers)						
	Farm Type Rubber Tired Tractor (when material handling or pulling wagons on a construction project)						
	Flat Beds, Single Rear Axle						
	Foam Distributor Truck Single Axle						
	Fuel Handler (station/bulk attendant)						
	Gear/Supply Truck						
	Gravel Spreader Box Operator on Truck						
	Hydro Seeder, Single Axle						
	Pickups (pilot cars & all light-duty vehicles)						
	Rigger						
	Swamper						
	Tack Truck (welders/gear)						
	Team Drivers (horses, mules, & similar equipment)						

**Tunnel Workers, Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)**

\*See per diem note on last page

						<b>L&amp;M</b>	<b>LEG</b>	
<b>N2201</b>	Group I, including:	39.60	9.55	21.16	1.65	0.30	0.20	72.46
	Brakeman							
	Mucker							

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Tunnel Workers, Laborers (The Alaska areas north of N63 latitude and east of W138 longitude)**  
 \*See per diem note on last page

<b>N2201</b>	Group I, including:	39.60	9.55	21.16	1.65	0.30	0.20	72.46
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- Nipper
- Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)
- Topman & Bull Gang
- Tunnel Track Laborer

<b>N2202</b>	Group II, including:	40.70	9.55	21.16	1.65	0.30	0.20	73.56
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- Burning & Cutting Torch
- Certified Erosion Sediment Control Lead (CESCL Laborer)
- Concrete Laborer
- Floor Preparation, Core Drilling
- Jackhammer/Chipping Gun or Pavement Breaker
- Laser Instrument Operator
- Nozzlemen, Pumpcrete or Shotcrete
- Pipelayer Helper

<b>N2203</b>	Group III, including:	41.69	9.55	21.16	1.65	0.30	0.20	74.55
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- Miner
- Retimberman

<b>N2204</b>	Group IIIA, including:	45.96	9.55	21.16	1.65	0.30	0.20	78.82
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- Asphalt Raker, Asphalt Belly Dump Lay Down
- Drill Doctor (in the field)
- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)
- Pioneer Drilling & Drilling Off Tugger (all type drills)
- Pipelayer
- Powderman (Employee Possessor)
- Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)
- Traffic Control Supervisor, DOT Qualified

<b>N2206</b>	Group IIIB, including:	52.10	5.50	21.16	1.65	0.30	0.20	80.91
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- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours)
- Federal Powderman (Responsible Person in Charge)
- Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones)
- Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours)
- Stake Hopper

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

**Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude)**  
 \*See per diem note on last page

<b>S2201</b>	Group I, including:	39.60	9.55	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	72.46
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- Brakeman
- Mucker
- Nipper
- Storm Water Pollution Protection Plan Worker (SWPPP Worker - erosion and sediment control Laborer)
- Topman & Bull Gang
- Tunnel Track Laborer

<b>S2202</b>	Group II, including:	40.70	9.55	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	73.56
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- Burning & Cutting Torch
- Certified Erosion Sediment Control Lead (CESCL Laborer)
- Concrete Laborer
- Floor Preparation, Core Drilling
- Jackhammer/Chipping Gun or Pavement Breaker
- Laser Instrument Operator
- Nozzlemen, Pumpcrete or Shotcrete
- Pipelayer Helper

<b>S2203</b>	Group III, including:	41.69	9.55	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	74.55
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- Miner
- Retimberman

<b>S2204</b>	Group IIIA, including:	45.96	9.55	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	78.82
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- Asphalt Raker, Asphalt Belly Dump Lay Down
- Drill Doctor (in the field)
- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)
- Pioneer Drilling & Drilling Off Tugger (all type drills)
- Pipelayer
- Powderman (Employee Possessor)
- Storm Water Pollution Protection Plan Specialist (SWPPP Specialist)
- Traffic Control Supervisor, DOT Qualified

<b>S2206</b>	Group IIIB, including:	52.10	5.50	21.16	1.65	<b>L&amp;M</b>	<b>LEG</b>	80.91
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- Driller (including, but not limited to wagon drills, air-track drills, hydraulic drills)(over 5,000 hours)
- Federal Powderman (Responsible Person in Charge)
- Grade Checking (setting or transferring of grade marks, line and grade, GPS, drones)
- Pioneer Drilling & Drilling Off Tugger (all type drills)(over 5,000 hours)

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation



**Tunnel Workers, Laborers (The area that is south of N63 latitude and west of W138 longitude)**  
 \*See per diem note on last page

<b>S2206</b>	Group IIIB, including:	52.10	5.50	21.16	1.65		<b>L&amp;M</b>	<b>LEG</b>	
	Stake Hopper						0.30	0.20	80.91

**Tunnel Workers, Power Equipment Operators**  
 \*See per diem note on last page

<b>A2207</b>	Group I	52.51	11.40	14.75	1.00		<b>L&amp;M</b>		
							0.10	0.05	79.81
<b>A2208</b>	Group IA	54.60	11.40	14.75	1.00		<b>L&amp;M</b>		
							0.10	0.05	81.90
<b>A2209</b>	Group II	51.60	11.40	14.75	1.00		<b>L&amp;M</b>		
							0.10	0.05	78.90
<b>A2210</b>	Group III	50.74	11.40	14.75	1.00		<b>L&amp;M</b>		
							0.10	0.05	78.04
<b>A2211</b>	Group IV	43.36	11.40	14.75	1.00		<b>L&amp;M</b>		
							0.10	0.05	70.66

\* Per diem is an established practice for this classification. This means that per diem is an allowable alternative to board and lodging if all criteria are met. See 8 AAC 30.051-08 AAC 30.056, and the per diem information on page vii of this Pamphlet.

\*\* Work in combination of classifications: Employees working in any combination of classifications within the diving crew (working diver, standby diver, and tender) in a shift are paid in the classification with the highest rate for a minimum of 8 hours per shift.

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

### Shipyards Rates Addendum

This Addendum was developed to address the specialized industry of shipbuilding/repair in Alaska, as it relates to public works. For the purposes of providing rates for shipyard work the Department is adopting Shipyards rates from the state of Washington ( King County ). These rates only apply to work done in shipbuilding/repair in Alaska, under a public contract. This addendum will be updated two times a year to coincide with the corresponding Issue of *Laborers and Mechanics MINIMUM RATES OF PAY*.

Class Code	BHR H&W PEN TRN Other Benefits	THR
<b>Shipyards Workers</b> *See total hourly(THR) note below		
A2300	Ship Building/Repair Boilermaker	50.35
A2305	Ship Building/Repair Carpenter	50.95
A2310	Ship Building/Repair Crane Operator	45.06
A2315	Ship Building/Repair Electrician	50.42
A2320	Ship Building/Repair Heat & Frost Insulator	84.58
A2325	Ship Building/Repair Laborer	50.95
A2330	Ship Building/Repair Mechanist	50.95
A2335	Ship Building/Repair Operating Engineer	45.06
A2340	Ship Building/Repair Painter	50.95
A2345	Ship Building/Repair Pipefitter	50.95
A2350	Ship Building/Repair Rigger	50.35
A2355	Ship Building/Repair Sheet Metal	50.35
A2360	Ship Building/Repair Shipwright	50.95
A2365	Ship Building/Repair Warehouse	45.06

\*The THR includes the base hourly rate (BHR) and fringe benefits. Employers must pay a BHR and fringe benefit package that adds up to the THR. Fringe benefits included in the THR can be paid to employees in three ways; paid into a union trust fund, into an approved benefit plan, or paid directly on the paycheck as gross wages.

Wage benefits key: BHR=basic hourly rate; H&W=health and welfare; IAF=industry advancement fund; LEG=legal fund; L&M=labor/management fund; PEN=pension fund; SAF=safety; SUI=supplemental unemployment insurance; S&L=SUI & LEG combined; TRN=training; THR=total hourly rate; VAC=vacation

# Davis–Bacon Requirements

## **Wage Rate Requirements Under The Consolidated and Further Continuing Appropriations Act, 2013 (P.L. 113-6)**

### **Preamble**

With respect to the Clean Water and Safe Drinking Water State Revolving Funds, EPA provides capitalization grants to each State which in turn provides subgrants or loans to eligible entities within the State. Typically, the subrecipients are municipal or other local governmental entities that manage the funds. For these types of recipients, the provisions set forth under Roman Numeral I, below, shall apply. Although EPA and the State remain responsible for ensuring subrecipients' compliance with the wage rate requirements set forth herein, those subrecipients shall have the primary responsibility to maintain payroll records as described in Section 3(ii)(A), below and for compliance as described in Section I-5.

Occasionally, the subrecipient may be a private for profit or not for profit entity. For these types of recipients, the provisions set forth in Roman Numeral II, below, shall apply. Although EPA and the State remain responsible for ensuring subrecipients' compliance with the wage rate requirements set forth herein, those subrecipients shall have the primary responsibility to maintain payroll records as described in Section II-3(ii)(A), below and for compliance as described in Section II-5.

### **I. Requirements Under The Consolidated and Further Continuing Appropriations Act, 2013 (P.L. 113-6) For Subrecipients That Are Governmental Entities:**

The following terms and conditions specify how recipients will assist EPA in meeting its Davis-Bacon (DB) responsibilities when DB applies to EPA awards of financial assistance under the FY 2013 Continuing Resolution with respect to State recipients and subrecipients that are governmental entities. If a subrecipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient. If a State recipient needs guidance, the recipient may contact Lorraine Fleury at [fleury.lorraine@epa.gov](mailto:fleury.lorraine@epa.gov) or at 215-814-2341 of EPA, Region III Grants and Audit Management Branch for guidance. The recipient or subrecipient may also obtain additional guidance from DOL's web site at <http://www.dol.gov/whd/>

#### **1. Applicability of the Davis- Bacon (DB) prevailing wage requirements.**

Under the FY 2013 Continuing Resolution, DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the recipient State before authorizing work on that site.

#### **2. Obtaining Wage Determinations.**

(a) Subrecipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

- (i) While the solicitation remains open, the subrecipient shall monitor [www.wdol.gov](http://www.wdol.gov) weekly to ensure that the wage determination contained in the solicitation remains current. The subrecipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the subrecipient.
- (ii) If the subrecipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the subrecipient, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The subrecipient shall monitor [www.wdol.gov](http://www.wdol.gov) on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(b) If the subrecipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the subrecipient shall insert the appropriate DOL wage determination from [www.wdol.gov](http://www.wdol.gov) into the ordering instrument.

(c) Subrecipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a subrecipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the subrecipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the subrecipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The subrecipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

### **3. Contract and Subcontract provisions.**

(a) The Recipient shall insure that the subrecipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a treatment work under the CWSRF or a construction project under the DWSRF financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or the FY 2013 Continuing Resolution, the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's web site, [www.dol.gov](http://www.dol.gov).

(ii)(A) The subrecipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

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

(2) The classification is utilized in the area by the construction industry; and

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

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the subrecipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the subrecipient (s) to the State award official. The State award official will transmit the request, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative,

will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the subrecipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request and the local wage determination, including the views of all interested parties and the recommendation of the State award official, to the Administrator for determination. The request shall be sent to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

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

(2) Withholding. The subrecipient(s), shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each

such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the subrecipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the subrecipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the subrecipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the subrecipient(s).

(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

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

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

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

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees--

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the



applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

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

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

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

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

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

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### **4. Contract Provision for Contracts in Excess of \$100,000.**

(a) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

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

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (a)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (a)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (a)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The subrecipient, upon written request of the EPA Award Official or an authorized representative of the Department of Labor, shall withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or

any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (a)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (a)(1) through (4) of this section.

(b) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Subrecipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Subrecipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

## 5. Compliance Verification

(a) The subrecipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The subrecipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.

(b) The subrecipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Subrecipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Subrecipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence."

(c) The subrecipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The subrecipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable, the subrecipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Subrecipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or

subcontractor is not complying with DB. In addition, during the examinations the subrecipient shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.

(d) The subrecipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Subrecipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <http://www.dol.gov/contacts/whd/america2.htm>.

## **II. Requirements Under The Consolidated and Further Continuing Appropriations Act, 2013 (P.L. 113-6) For Subrecipients That Are Not Governmental Entities:**

The following terms and conditions specify how recipients will assist EPA in meeting its DB responsibilities when DB applies to EPA awards of financial assistance under the FY2013 Continuing Resolution with respect to subrecipients that are not governmental entities. If a subrecipient has questions regarding when DB applies, obtaining the correct DB wage determinations, DB provisions, or compliance monitoring, it may contact the State recipient for guidance. If a State recipient needs guidance, the recipient may contact Lorraine Fleury at [fleury.lorraine@epa.gov](mailto:fleury.lorraine@epa.gov) or at 215-814-2341 of EPA, Region III Grants and Audit Management Branch for guidance. The recipient or subrecipient may also obtain additional guidance from DOL's web site at <http://www.dol.gov/whd/>

**Under these terms and conditions, the subrecipient must submit its proposed DB wage determinations to the State recipient for approval prior to including the wage determination in any solicitation, contract task orders, work assignments, or similar instruments to existing contractors.**

### 1. Applicability of the Davis- Bacon (DB) prevailing wage requirements.

Under the FY 2013 Continuing Resolution, DB prevailing wage requirements apply to the construction, alteration, and repair of treatment works carried out in whole or in part with assistance made available by a State water pollution control revolving fund and to any construction project carried out in whole or in part by assistance made available by a drinking water treatment revolving loan fund. If a subrecipient encounters a unique situation at a site that presents uncertainties regarding DB applicability, the subrecipient must discuss the situation with the recipient State before authorizing work on that site.

### 2. Obtaining Wage Determinations.

(a) Subrecipients must obtain proposed wage determinations for specific localities at [www.wdol.gov](http://www.wdol.gov). After the Subrecipient obtains its proposed wage determination, it must submit the wage determination to **INSERT STATE CONTACT NAME, EMAIL, and TELEPHONE NUMBER** for approval prior to inserting the wage determination into a solicitation, contract or issuing task orders, work assignments or similar

instruments to existing contractors (ordering instruments unless subsequently directed otherwise by the State recipient Award Official.

(b) Subrecipients shall obtain the wage determination for the locality in which a covered activity subject to DB will take place prior to issuing requests for bids, proposals, quotes or other methods for soliciting contracts (solicitation) for activities subject to DB. These wage determinations shall be incorporated into solicitations and any subsequent contracts. Prime contracts must contain a provision requiring that subcontractors follow the wage determination incorporated into the prime contract.

(i) While the solicitation remains open, the subrecipient shall monitor [www.wdol.gov](http://www.wdol.gov) on a weekly basis to ensure that the wage determination contained in the solicitation remains current. The subrecipients shall amend the solicitation if DOL issues a modification more than 10 days prior to the closing date (i.e. bid opening) for the solicitation. If DOL modifies or supersedes the applicable wage determination less than 10 days prior to the closing date, the subrecipients may request a finding from the State recipient that there is not a reasonable time to notify interested contractors of the modification of the wage determination. The State recipient will provide a report of its findings to the subrecipient.

(ii) If the subrecipient does not award the contract within 90 days of the closure of the solicitation, any modifications or supersedes DOL makes to the wage determination contained in the solicitation shall be effective unless the State recipient, at the request of the subrecipient, obtains an extension of the 90 day period from DOL pursuant to 29 CFR 1.6(c)(3)(iv). The subrecipient shall monitor [www.wdol.gov](http://www.wdol.gov) on a weekly basis if it does not award the contract within 90 days of closure of the solicitation to ensure that wage determinations contained in the solicitation remain current.

(c) If the subrecipient carries out activity subject to DB by issuing a task order, work assignment or similar instrument to an existing contractor (ordering instrument) rather than by publishing a solicitation, the subrecipient shall insert the appropriate DOL wage determination from [www.wdol.gov](http://www.wdol.gov) into the ordering instrument.

(c) Subrecipients shall review all subcontracts subject to DB entered into by prime contractors to verify that the prime contractor has required its subcontractors to include the applicable wage determinations.

(d) As provided in 29 CFR 1.6(f), DOL may issue a revised wage determination applicable to a subrecipient's contract after the award of a contract or the issuance of an ordering instrument if DOL determines that the subrecipient has failed to incorporate a wage determination or has used a wage determination that clearly does not apply to the contract or ordering instrument. If this occurs, the subrecipient shall either terminate the contract or ordering instrument and issue a revised solicitation or ordering instrument or incorporate DOL's wage determination retroactive to the beginning of the contract or ordering instrument by change order. The subrecipient's contractor must be compensated for any increases in wages resulting from the use of DOL's revised wage determination.

### **3. Contract and Subcontract provisions.**

(a) The Recipient shall insure that the subrecipient(s) shall insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and

decorating, of a treatment work under the CWSRF or a construction project under the DWSRF financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1 or the FY 2013 Continuing Resolution, the following clauses:

(1) Minimum wages.

(i) All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3) ), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Subrecipients may obtain wage determinations from the U.S. Department of Labor's web site, [www.dol.gov](http://www.dol.gov).

(ii)(A) The subrecipient(s), on behalf of EPA, shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The State award official shall approve a request for an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

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

(2) The classification is utilized in the area by the construction industry; and

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

(B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the subrecipient(s) agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), documentation of the action taken and the request, including the local wage determination shall be sent by the subrecipient(s) to the State award official. The State award official will transmit the report, to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210 and to the EPA DB Regional Coordinator concurrently. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification request within 30 days of receipt and so advise the State award official or will notify the State award official within the 30-day period that additional time is necessary.

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the and the subrecipient(s) do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the award official shall refer the request, and the local wage determination, including the views of all interested parties and the recommendation of the State award official, to the Administrator for determination. The request shall be sent to the EPA Regional Coordinator concurrently. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt of the request and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii)(B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

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

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

(2) Withholding. The subrecipient(s) shall upon written request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or

working on the site of the work, all or part of the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

(3) Payrolls and basic records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly, for each week in which any contract work is performed, a copy of all payrolls to the subrecipient, that is, the entity that receives the sub-grant or loan from the State capitalization grant recipient. Such documentation shall be available on request of the State recipient or EPA. As to each payroll copy received, the subrecipient shall provide written confirmation in a form satisfactory to the State indicating whether or not the project is in compliance with the requirements of 29 CFR 5.5(a)(1) based on the most recent payroll copies for the specified week. The payrolls shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on the weekly payrolls. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the subrecipient(s) for transmission to the State or EPA if requested by EPA, the State, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the subrecipient(s).



(B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

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

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

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

(D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

(iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the State, EPA or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency or State may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

(4) Apprentices and trainees--

(i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is

not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

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

(6) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the EPA determines may be appropriate, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

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

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

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

(10) Certification of eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

#### **4. Contract Provision for Contracts in Excess of \$100,000.**

(a) Contract Work Hours and Safety Standards Act. The subrecipient shall insert the following clauses set forth in paragraphs (a)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by Item 3, above or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

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

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The subrecipient shall upon the request of the EPA Award Official or an authorized representative of the Department of Labor, withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (a)(2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.

(c) In addition to the clauses contained in Item 3, above, in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in 29 CFR 5.1, the Subrecipient shall insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Subrecipient shall insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.

## 5. Compliance Verification

(a). The subrecipient shall periodically interview a sufficient number of employees entitled to DB prevailing wages (covered employees) to verify that contractors or subcontractors are paying the appropriate wage rates. As provided in 29 CFR 5.6(a)(6), all interviews must be conducted in confidence. The subrecipient must use Standard Form 1445 (SF 1445) or equivalent documentation to memorialize the interviews. Copies of the SF 1445 are available from EPA on request.

(b) The subrecipient shall establish and follow an interview schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. Subrecipients must conduct more frequent interviews if the initial interviews or other information indicated that there is a risk that the contractor or subcontractor is not complying with DB. Subrecipients shall immediately conduct interviews in response to an alleged violation of the prevailing wage requirements. All interviews shall be conducted in confidence."

(c). The subrecipient shall periodically conduct spot checks of a representative sample of weekly payroll data to verify that contractors or subcontractors are paying the appropriate wage rates. The subrecipient shall establish and follow a spot check schedule based on its assessment of the risks of noncompliance with DB posed by contractors or subcontractors and the duration of the contract or subcontract. At a minimum, if practicable the subrecipient should spot check payroll data within two weeks of each contractor or subcontractor's submission of its initial payroll data and two weeks prior to the completion date the contract or subcontract. Subrecipients must conduct more frequent spot checks if the initial spot check or other information indicates that there is a risk that the contractor or subcontractor is not complying with DB . In addition, during the examinations the subrecipient shall verify evidence of fringe benefit plans and payments thereunder by contractors and subcontractors who claim credit for fringe benefit contributions.

(d). The subrecipient shall periodically review contractors and subcontractors use of apprentices and trainees to verify registration and certification with respect to apprenticeship and training programs approved by either the U.S Department of Labor or a state, as appropriate, and that contractors and subcontractors are not using disproportionate numbers of, laborers, trainees and apprentices. These reviews shall be conducted in accordance with the schedules for spot checks and interviews described in Item 5(b) and (c) above.

(e) Subrecipients must immediately report potential violations of the DB prevailing wage requirements to the EPA DB contact listed above and to the appropriate DOL Wage and Hour District Office listed at <http://www.dol.gov/whd/america2.htm>.

"General Decision Number: AK20230001 04/14/2023

Superseded General Decision Number: AK20220001

State: Alaska

Construction Types: Building and Heavy

Counties: Alaska Statewide.

BUILDING AND HEAVY CONSTRUCTION PROJECTS (does not include residential construction consisting of single family homes and apartments up to and including 4 stories)

Note: Contracts subject to the Davis-Bacon Act are generally required to pay at least the applicable minimum wage rate required under Executive Order 14026 or Executive Order 13658. Please note that these Executive Orders apply to covered contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but do not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60).

<p>If the contract is entered into on or after January 30, 2022, or the contract is renewed or extended (e.g., an option is exercised) on or after January 30, 2022:</p>	<ul style="list-style-type: none"> <li>. Executive Order 14026 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$16.20 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2023.</li> </ul>
<p>If the contract was awarded on or between January 1, 2015 and January 29, 2022, and the contract is not renewed or extended on or after January 30, 2022:</p>	<ul style="list-style-type: none"> <li>. Executive Order 13658 generally applies to the contract.</li> <li>. The contractor must pay all covered workers at least \$12.15 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on that contract in 2023.</li> </ul>

The applicable Executive Order minimum wage rate will be adjusted annually. If this contract is covered by one of the Executive Orders and a classification considered necessary for performance of work on the contract does not appear on this wage determination, the contractor must still submit a conformance request.

Additional information on contractor requirements and worker protections under the Executive Orders is available at <http://www.dol.gov/whd/govcontracts>.

Modification Number      Publication Date  
 0                              01/06/2023

- 1 01/13/2023
- 2 01/27/2023
- 3 04/14/2023

ASBE0097-001 06/01/2021

	Rates	Fringes
Asbestos Workers/Insulator (includes application of all insulating materials protective coverings, coatings and finishings to all types of mechanical systems).....	\$ 38.68	21.57
HAZARDOUS MATERIAL HANDLER (includes preparation, wetting, stripping, removal scrapping, vacuuming, bagging, and disposing of all insulation materials, whether they contain asbestos or not, from mechanical systems).....	\$ 37.38	19.55

BOIL0502-002 01/01/2021

	Rates	Fringes
BOILERMAKER.....	\$ 47.03	30.59

BRAK0001-002 07/01/2020

	Rates	Fringes
Bricklayer, Blocklayer, Stonemason, Marble Mason, Tile Setter, Terrazzo Worker.....	\$ 42.16	19.67
Tile & Terrazzo Finisher.....	\$ 35.99	19.67

CARP1281-001 09/01/2022

	Rates	Fringes
CARPENTER Including Lather and Drywall Hanging.....	\$ 43.34	28.86

\* CARP1281-002 09/01/2022

	Rates	Fringes
MILLWRIGHT.....	\$ 46.48	24.32

CARP2520-003 09/01/2022

	Rates	Fringes
Diver		
Stand-by.....	\$ 47.65	28.32
Tender.....	\$ 46.65	28.32
Working.....	\$ 87.45	28.32
Piledriver		
Piledriver; Skiff Operator and Rigger.....	\$ 38.34	26.51
Sheet Stabber.....	\$ 38.34	26.51

Welder.....\$ 43.90 26.51

DEPTH PAY PREMIUM FOR DIVERS BELOW WATER SURFACE:

50-100 feet \$1.00 per foot
101 feet and deeper \$2.00 per foot

ENCLOSURE PAY PREMIUM WITH NO VERTICAL ASCENT:

5-50 FEET \$1.00 PER FOOT/DAY
51-100 FEET \$2.00 PER FOOT/DAY
101 FEET AND ABOVE \$3.00 PER FOOT/DAY

SATURATION DIVING:

The standby rate applies until saturation starts. The saturation diving rate applies when divers are under pressure continuously until work task and decompression are complete. the diver rate shall be paid for all saturation hours.

WORK IN COMBINATION OF CLASSIFICATIONS:

Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

\* ELEC1547-004 04/01/2023

Table with 2 columns: Rates, Fringes. Rows: CABLE SPLICER...\$ 44.44 3%+28.39, ELECTRICIAN...\$ 44.44 3%+28.39

\* ELEC1547-005 04/01/2023

Line Construction

Table with 2 columns: Rates, Fringes. Rows: CABLE SPLICER...\$ 63.44 3%+31.90, Linemen (Including Equipment Operators, Technician)...\$ 61.29 3%+30.98, Powderman...\$ 61.44 3%+32.69, TREE TRIMMER...\$ 40.71 3 5+28.05

ELEV0019-002 01/01/2023

Table with 2 columns: Rates, Fringes. Row: ELEVATOR MECHANIC...\$ 65.83 37.335+a+b

FOOTNOTE: a. Employer contributes 8% of the basic hourly rate for over 5 year's service and 6% of the basic hourly rate for 6 months to 5 years' of service as vacation paid credit. b. Eight paid holidays: New Year's Day; Memorial Day; Independence Day; Labor Day; Veteran's Day; Thanksgiving Day; Friday after Thanksgiving, and Christmas Day

\* ENGI0302-002 04/01/2023

Table with 2 columns: Rates, Fringes. Row: POWER EQUIPMENT OPERATOR GROUP 1...\$ 49.64 27.20



GROUP 1A.....	\$ 47.74	27.20
GROUP 2.....	\$ 46.91	27.20
GROUP 3.....	\$ 46.13	27.20
GROUP 4.....	\$ 39.42	27.20
TUNNEL WORK		
GROUP 1.....	\$ 52.51	27.20
GROUP 1A.....	\$ 54.60	27.20
GROUP 2.....	\$ 51.60	27.20
GROUP 3.....	\$ 50.74	27.20
GROUP 4.....	\$ 43.36	27.20

#### POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Asphalt Roller: Breakdown, Intermediate, and Finish; Back Filler; Barrier Machine (Zipper); Beltcrete with power pack and similar conveyors; Bending Machine; Boat Coxwains; Bulldozers; Cableways, Highlines and Cablecars; Cleaning Machine; Coating Machine; Concrete Hydro Blaster; Cranes-45 tons and under or 150 foot boom and under (including jib and attachments): (a) Hydralifts or Transporters, all track or truck type,(b) Derricks; Crushers; Deck Winches-Double Drum; Ditching or Trenching Machine (16 inch or over); Drilling Machines, core, cable, rotary and exploration; Finishing Machine Operator, Concrete Paving, Laser Screed, Sidewalk, Curb and Gutter Machine; Helicopters; Hover Craft, Flex Craft, Loadmaster, Air Cushion, All Terrain Vehicle, Rollagon, Bargecable, Nodwell, and Snow Cat; Hydro Ax: Feller Buncher and similar; Loaders (2 1/2 yards through 5 yards, including all attachments): Forklifts with telescopic boom and swing attachment, Overhead and front end, 2 1/2 yards through 5 yards, Loaders with forks or pipe clamps; Loaders, elevating belt type, Euclid and similar types; Mechanics, Bodyman; Micro Tunneling Machine; Mixers: Mobile type w/hoist combination; Motor Patrol Grader; Mucking Machines: Mole, Tunnel Drill, Horizontal/Directional Drill Operator, and/or Shield; Operator on Dredges; Piledriver Engineers, L. B. Foster, Puller or similar Paving Breaker; Power Plant, Turbine Operator, 200 k.w. and over (power plants or combination of power units over 300 k.w.); Scrapers-through 40 yards; Service Oiler/Service Engineer; Sidebooms-under 45 tons; Shot Blast Machine; Shovels, Backhoes, Excavators with all attachments, and Gradealls (3 yards and under), Spreaders, Blaw Knox, Cedarapids, Barber Greene, Slurry Machine; Sub-grader (Gurries, Reclaimer, and similar types); Tack tractor; Truck mounted Concrete Pumps, Conveyor, Creter; Water Kote Machine; Unlicensed off road hauler

GROUP 1A: Camera/Tool/Video Operator (Slipline), Cranes-over 45 tons or 150 foot (including jib and attachments): (a) Clamshells and Draglines (over 3 yards), (b) Tower cranes; Licensed Water/Waste Water Treatment Operator; Loaders over 5 yds.; Certified Welder, Electrical Mechanic, Camp Maintenance Engineer, Mechanic (over 10,000 hours); Motor Patrol Grader, Dozer, Grade Tractor, Roto-mill/Profiler (finish: when finishing to final grade and/or to hubs, or for asphalt); Power Plants: 1000 k.w. and over; Quad; Screed; Shovels, Backhoes, Excavators with all attachments (over 3 yards), Sidebooms over 45 tons; Slip Form Paver, C.M.I. and similar types; Scrapers over 40 yards;

GROUP 2: Boiler-fireman; Cement Hog and Concrete Pump Operator; Conveyors (except as listed in group 1); Hoist on

steel erection; Towermobiles and Air Tuggers; Horizontal/Directional Drill Locator; Licensed Grade Technician; Loaders, (i.e., Elevating Grader and Material Transfer Vehicle); Locomotives: rod and geared engines; Mixers; Screening, Washing Plant; Sideboom (cradling rock drill regardless of size); Skidder; Trenching Machine under 16 inches; Waste/ Waste Water Treatment Operator.

GROUP 3: "A" Frame Trucks, Deck Winches: single power drum; Bombardier (tack or tow rig); Boring Machine; Brooms-power; Bump Cutter; Compressor; Farm tractor; Forklift, industrial type; Gin Truck or Winch Truck with poles when used for hoisting; Grade Checker and Stake Hopper; Hoist, Air Tuggers, Elevators; Loaders: (a) Elevating-Athey, Barber Green and similar types (b) Forklifts or Lumber Carrier (on construction job site) (c) Forklifts with Tower (d) Overhead and Front-end, under 2 1/2 yds. Locomotives: Dinkey (air, steam, gas and electric) Speeders; Mechanics (light duty); Oil, Blower Distribution; Post Hole Diggers, mechanical; Pot Fireman (power agitated); Power Plant, Turbine Operator, under 200 k.w.; Pumps-water; Roller-other than Plantmix; Saws, concrete; Skid Steer with all attachments; Straightening Machine; Tow Tractor

GROUP 4: Rig Oiler/Crane Assistant Engineer; Parts and Equipment Coordinator; Swamper (on trenching machines or shovel type equipment); Spotter; Steam Cleaner; Drill Helper.

FOOTNOTE: Groups 1-4 receive 10% premium while performing tunnel or underground work. Rig Oiler/Crane Assistant Engineer shall be required on cranes over 85 tons or over 100 feet of boom.

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IRON0751-003 07/01/2022

	Rates	Fringes
IRONWORKER		
BENDER OPERATOR.....	\$ 41.49	34.86
BRIDGE, STRUCTURAL,		
ORNAMENTAL,		
REINFORCING		
MACHINERY MOVER,		
RIGGER,		
SHEETER, STAGE		
RIGGER,		
BENDER OPERATOR.....	\$ 41.49	34.86
BRIDGE, STRUCTURAL,		
ORNAMENTAL, REINFORCING		
MACHINERY MOVER, RIGGER,		
SHEETER, STAGE RIGGER,		
BENDER OPERATOR.....	\$ 38.75	32.63
FENCE, BARRIER INSTALLER....	\$ 37.99	34.86
GUARDRAIL INSTALLERS.....	\$ 38.99	34.86
GUARDRAIL LAYOUT MAN.....	\$ 38.72	34.86
HELICOPTER, TOWER.....	\$ 42.49	34.86

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LABO0341-001 04/01/2021

	Rates	Fringes
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LABORER (South of the 63rd  
Parallel & West of Longitude  
138 Degrees)

GROUP 1.....	\$ 32.00	31.11
GROUP 2.....	\$ 33.00	31.11
GROUP 3.....	\$ 33.90	31.11
GROUP 3A.....	\$ 37.18	31.11
GROUP 3B.....	\$ 40.97	28.40
GROUP 4.....	\$ 21.57	31.11
TUNNELS, SHAFTS, AND RAISES		
GROUP 1.....	\$ 35.20	31.11
GROUP 2.....	\$ 36.30	31.11
GROUP 3.....	\$ 37.29	31.11
GROUP 3A.....	\$ 40.90	31.11
GROUP 3B.....	\$ 45.07	28.40

#### LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Workers (shovelman, plant crew); Brush Cutters; Camp Maintenance Laborer; Carpenter Tenders; Choke Setters, Hook Tender, Rigger, Signalman; Concrete Laborer (curb and gutter, chute handler, grouting, curing, screeding); Crusher Plant Laborer; Demolition Laborer; Ditch Diggers; Dump Man; Environmental Laborer (asbestos (limited to nonmechanical systems), hazardous and toxic waste, oil spill); Fence Installer; Fire Watch Laborer; Flagman; Form Strippers; General Laborer; Guardrail Laborer, Bridge Rail Installers; Hydro-Seeder Nozzleman; Laborers (building); Landscape or Planter; Laying of Decorative Block (retaining walls, flowered decorative block 4 feet and below); Material Handlers; Pneumatic or Power Tools; Portable or Chemical Toilet Serviceman; Pump Man or Mixer Man; Railroad Track Laborer; Sandblast, Pot Tender; Saw Tenders; Scaffold Building and Erecting; Slurry Work; Stake Hopper; Steam Point or Water Jet Operator; Steam Cleaner Operator; Tank Cleaning; Utiliwalk, Utilidor Laborer and Conduit Installer; Watchman (construction projects); Window Cleaner

GROUP 2: Burning and Cutting Torch; Cement or Lime Dumper or Handler (sack or bulk); Choker Splicer; Chucktender (wagon, airtrack and hydraulic drills); Concrete Laborers (power buggy, concrete saws, pumpcrete nozzleman, vibratorman); Culvert Pipe Laborer; Cured in place Pipelayer; Environmental Laborer (marine work, oil spill skimmer operator, small boat operator); Foam Gun or Foam Machine Operator; Green Cutter (dam work); Gunnite Operator; Hod Carriers; Jackhammer or Pavement Breakers (more than 45 pounds); Laying of Decorative Block (retaining walls, flowered decorative block above 4 feet); Mason Tender and Mud Mixer (sewer work); Pilot Car; Plasterer, Bricklayer and Cement Finisher Tenders; Power Saw Operator; Railroad Switch Layout Laborer; Sandblaster; Sewer Caulkers; Sewer Plant Maintenance Man; Thermal Plastic Applicator; Timber Faller, chain saw operator, filer; Timberman

GROUP 3: Alarm Installer; Bit Grinder; Guardrail Machine Operator; High Rigger and tree topper; High Scaler; Multiplate; Slurry Seal Squeegee Man

GROUP 3A: Asphalt Raker, Asphalt Belly dump lay down; Drill Doctor (in the field); Drillers (including, but not limited to, wagon drills, air track drills; hydraulic drills);

Powderman; Pioneer Drilling and Drilling Off Tugger (all type drills); Pipelayers

GROUP 3B: Grade checker (setting or transferring of grade marks, line and grade)

GROUP 4: Final Building Cleanup

TUNNELS, SHAFTS, AND RAISES CLASSIFICATIONS

GROUP 1: Brakeman; Muckers; Nippers; Topman and Bull Gang; Tunnel Track Laborer

GROUP 2: Burning and Cutting Torch; Concrete Laborers; Jackhammers; Nozzleman, Pumpcrete or Shotcrete.

GROUP 3: Miner; Retimberman

GROUP 3A: Asphalt Raker, Asphalt Belly dump lay down; Drill Doctor (in the field); Drillers (including, but not limited to, wagon drills, air track drills; hydraulic drills); Powderman; Pioneer Drilling and Drilling Off Tugger (all type drills); Pipelayers.

GROUP 3B: Grade checker (setting or transferring of grade marks, line and grade)

Tunnel shaft and raise rates only apply to workers regularly employed inside a tunnel portal or shaft collar.

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LAB00942-001 04/01/2022

	Rates	Fringes
Laborers: North of the 63rd Parallel & East of Longitude 138 Degrees		
GROUP 1.....	\$ 33.00	31.37
GROUP 2.....	\$ 34.00	31.37
GROUP 3.....	\$ 34.90	31.37
GROUP 3A.....	\$ 38.18	31.37
GROUP 3B.....	\$ 41.97	29.00
GROUP 4.....	\$ 22.57	31.37
TUNNELS, SHAFTS, AND RAISES		
GROUP 1.....	\$ 36.20	31.37
GROUP 2.....	\$ 37.40	31.37
GROUP 3.....	\$ 38.39	31.37
GROUP 3A.....	\$ 42.00	31.37
GROUP 3B.....	\$ 46.17	29.00

LABORERS CLASSIFICATIONS

GROUP 1: Asphalt Workers (shovelman, plant crew); Brush Cutters; Camp Maintenance Laborer; Carpenter Tenders; Choke Setters, Hook Tender, Rigger, Signalman; Concrete Laborer (curb and gutter, chute handler, grouting, curing, screeding); Crusher Plant Laborer; Demolition Laborer; Ditch Diggers; Dump Man; Environmental Laborer (asbestos (limited to nonmechanical systems), hazardous and toxic waste, oil spill); Fence Installer; Fire Watch Laborer; Flagman; Form Strippers; General Laborer; Guardrail Laborer, Bridge Rail Installers; Hydro-Seeder Nozzleman; Laborers (building); Landscape or Planter; Laying of Decorative Block (retaining walls, flowered decorative

block 4 feet and below); Material Handlers; Pneumatic or Power Tools; Portable or Chemical Toilet Serviceman; Pump Man or Mixer Man; Railroad Track Laborer; Sandblast, Pot Tender; Saw Tenders; Scaffold Building and Erecting; Slurry Work; Stake Hopper; Steam Point or Water Jet Operator; Steam Cleaner Operator; Tank Cleaning; Utiliwalk, Utilidor Laborer and Conduit Installer; Watchman (construction projects); Window Cleaner

GROUP 2: Burning and Cutting Torch; Cement or Lime Dumper or Handler (sack or bulk); Choker Splicer; Chucktender (wagon, airtrack and hydraulic drills); Concrete Laborers (power buggy, concrete saws, pumpcrete nozzleman, vibratorman); Culvert Pipe Laborer; Cured in place Pipelayer; Environmental Laborer (marine work, oil spill skimmer operator, small boat operator); Foam Gun or Foam Machine Operator; Green Cutter (dam work); Gunnite Operator; Hod Carriers; Jackhammer or Pavement Breakers (more than 45 pounds); Laying of Decorative Block (retaining walls, flowered decorative block above 4 feet); Mason Tender and Mud Mixer (sewer work); Pilot Car; Plasterer, Bricklayer and Cement Finisher Tenders; Power Saw Operator; Railroad Switch Layout Laborer; Sandblaster; Sewer Caulkers; Sewer Plant Maintenance Man; Thermal Plastic Applicator; Timber Faller, chain saw operator, filer; Timberman

GROUP 3: Alarm Installer; Bit Grinder; Guardrail Machine Operator; High Rigger and tree topper; High Scaler; Multiplate; Slurry Seal Squeegee Man

GROUP 3A: Asphalt Raker, Asphalt Belly dump lay down; Drill Doctor (in the field); Drillers (including, but not limited to, wagon drills, air track drills; hydraulic drills); Powderman; Pioneer Drilling and Drilling Off Tugger (all type drills); Pipelayers

GROUP 3B: Grade checker (setting or transferring of grade marks, line and grade)

GROUP 4: Final Building Cleanup

#### TUNNELS, SHAFTS, AND RAISES CLASSIFICATIONS

GROUP 1: Brakeman; Muckers; Nippers; Topman and Bull Gang; Tunnel Track Laborer

GROUP 2: Burning and Cutting Torch; Concrete Laborers; Jackhammers; Nozzleman, Pumpcrete or Shotcrete.

GROUP 3: Miner; Retimberman

GROUP 3A: Asphalt Raker, Asphalt Belly dump lay down; Drill Doctor (in the field); Drillers (including, but not limited to, wagon drills, air track drills; hydraulic drills); Powderman; Pioneer Drilling and Drilling Off Tugger (all type drills); Pipelayers.

GROUP 3B: Grade checker (setting or transferring of grade marks, line and grade)

Tunnel shaft and raise rates only apply to workers regularly employed inside a tunnel portal or shaft collar.

NORTH OF THE 63RD PARALLEL

Rates Fringes

PAINTER

BRUSH/ROLLER PAINT OR WALL COVERER.....	\$ 36.08	25.45
TAPING, TEXTURING, STRUCTURAL PAINTING, SANDBLASTING, POT TENDER, FINISH METAL, SPRAY, BUFFER OPERATOR, RADON MITIGATION, LEAD BASED PAINT ABATEMENT, HAZARDOUS MATERIAL HANDLER.....	\$ 36.60	25.45

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PAIN1959-002 12/01/2021

SOUTH OF THE 63RD PARALLEL

Rates Fringes

PAINTER

General Painter.....	\$ 32.64	25.95
Industrial Painter.....	\$ 32.74	25.95
Taper / Paper & Vinyl Hanger.....	\$ 32.64	25.95

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PAIN1959-003 12/01/2021

NORTH OF THE 63RD PARALLEL

Rates Fringes

GLAZIER.....	\$ 41.16	28.16
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PAIN1959-004 07/01/2019

Rates Fringes

FLOOR LAYER: Carpet.....	\$ 28.75	14.44
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PAIN1959-006 12/01/2021

SOUTH OF THE 63RD PARALLEL

Rates Fringes

GLAZIER.....	\$ 41.37	27.25
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PLUM0262-002 01/01/2023

East of the 141st Meridian

Rates Fringes

Plumber; Steamfitter.....	\$ 41.50	27.62
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PLUM0367-002 07/01/2021

South of the 63rd Parallel

Rates Fringes

Plumber; Steamfitter.....	\$ 41.00	27.95
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 PLUM0375-002 07/01/2021

North of the 63rd Parallel

	Rates	Fringes
Plumber; Steamfitter.....	\$ 42.91	31.25

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 \* PLUM0669-002 04/01/2023

	Rates	Fringes
SPRINKLER FITTER.....	\$ 54.01	30.22

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 \* ROOF0189-006 04/01/2023

	Rates	Fringes
ROOFER.....	\$ 47.62	18.53

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 SHEE0023-003 08/01/2022

South of the 63rd Parallel

	Rates	Fringes
SHEET METAL WORKER.....	\$ 45.35	29.19

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 SHEE0023-004 07/01/2022

North of the 63rd Parallel

	Rates	Fringes
SHEET METAL WORKER.....	\$ 50.83	29.03

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 \* TEAM0959-003 04/01/2023

	Rates	Fringes
TRUCK DRIVER		
GROUP 1.....	\$ 46.84	24.33
GROUP 1A.....	\$ 48.19	24.33
GROUP 2.....	\$ 45.51	24.33
GROUP 3.....	\$ 44.64	24.33
GROUP 4.....	\$ 44.02	24.33
GROUP 5.....	\$ 43.22	24.33

GROUP 1: Semi with Double Box Mixer; Dump Trucks (including rockbuggy and trucks with pups) over 40 yards up to and including 60 yards; Deltas, Commanders, Rollogans and similar equipment when pulling sleds, trailers or similar equipment; Boat Coxswain; Lowboys including attached trailers and jeeps, up to and including 12 axles; Ready-mix over 12 yards up to and including 15 yards); Water Wagon (250 Bbls and above); Tireman, Heavy Duty/Fueler

GROUP 1A: Dump Trucks (including Rockbuggy and Trucks with pups) over 60 yards up to and including 100 yards; Jeeps (driver under load)

GROUP 2: Turn-O-Wagon or DW-10 not self-loading; All Deltas, Commanders, Rollogans, and similar equipment; Mechanics;

Dump Trucks (including Rockbuggy and Trucks with pups) over 20 yards up to and including 40 yards; Lowboys including attached trailers and jeeps up to and including 8 axles; Super vac truck/cacasco truck/heat stress truck; Ready-mix over 7 yards up to and including 12 yards; Partsman; Stringing Truck

GROUP 3: Dump Trucks (including Rockbuggy and Trucks with pups) over 10 yards up to and including 20 yards; batch trucks 8 yards and up; Oil distributor drivers; Oil Distributor Drivers; Trucks/Jeeps (push or pull); Traffic Control Technician

GROUP 4: Buggymobile; Semi or Truck and trailer; Dumpster; Tireman (light duty); Dump Trucks (including Rockbuggy and Truck with pups) up to and including 10 yards; Track Truck Equipment; Grease Truck; Flat Beds, dual rear axle; Hyster Operators (handling bulk aggregate); Lumber Carrier; Water Wagon, semi; Water Truck, dual axle; Gin Pole Truck, Winch Truck, Wrecker, Truck Mounted "A" Frame manufactured rating over 5 tons; Bull Lifts and Fork Lifts with Power Boom and Swing attachments, over 5 tons; Front End Loader with Forks; Bus Operator over 30 passengers; All Terrain Vehicles; Boom Truck/Knuckle Truck over 5 tons; Foam Distributor Truck/dual axle; Hydro-seeders, dual axle; Vacuum Trucks, Truck Vacuum Sweepers; Loadmaster (air and water); Air Cushion or similar type vehicle; Fire Truck/Ambulance Driver; Combination Truck-fuel and grease; Compactor (when pulled by rubber tired equipment); Rigger (air/water/oilfield); Ready Mix, up to and including 7 yards;

GROUP 5: Gravel Spreader Box Operator on Truck; Flat Beds, single rear axle; Boom Truck/Knuckle Truck up to and including 5 tons; Pickups (Pilot Cars and all light duty vehicles); Water Wagon (Below 250 Bbls); Gin Pole Truck, Winch Truck, Wrecker, Truck Mounted "A" Frame, manufactured rating 5 tons and under; Bull Lifts and Fork Lifts (fork lifts with power broom and swing attachments up to and including 5 tons); Buffer Truck; Tack Truck; Farm type Rubber Tired Tractor (when material handling or pulling wagons on a construction project); Foam Distributor, single axle; Hydro-Seeders, single axle; Team Drivers (horses, mules and similar equipment); Fuel Handler (station/bulk attendant); Batch Truck, up to and including 7 yards; Gear/Supply Truck; Bus Operator, Up to 30 Passengers; Rigger/Swamper

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is



like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at <https://www.dol.gov/agencies/whd/government-contracts>.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of ""identifiers"" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than ""SU"" or ""UAVG"" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the ""SU"" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a

new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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#### WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour National Office because National Office has responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

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

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

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

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

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

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

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

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END OF GENERAL DECISIO"

**CITY OF DILLINGHAM, ALASKA**  
**AERATED LAGOON FACILITY IMPROVEMENTS**

**TECHNICAL SPECIFICATIONS**

## SECTION 01 10 00 - DESCRIPTION OF WORK AND BASIS OF PAYMENT

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Description of Work
  - 2. General Information
  - 3. Quality Control
  - 4. Contractor's use of Site and premises
  - 5. Work sequence
  - 6. Owner occupancy
  - 7. Site Health and Safety Plan
  - 8. Spill Prevention and Cleanup Plan
  - 9. Record Drawings
  - 10. Basis of Payment

## 1.2 DESCRIPTION OF WORK

- A. All proposed work for the Lagoon Treatment Upgrades project will be constructed at the City of Dillingham lagoon site, as shown on the Contract Drawings. The Work included under this contract consists of furnishing all labor, materials, equipment, supervision, and other facilities necessary to successfully complete the Work set forth in the Specifications, Drawings and the terms of the Contract.
- B. The Work that is presented in the Contract Documents includes the following:

The replacement of aeration and baffle equipment in the existing lagoon systems, the replacement of aeration manifold from the Blower Building to the new aeration headers, the construction of a new pre-treatment pond for hauled wastewater (including inlet and outlet control structures), the construction of a gravity sewer line from the pre-treatment pond to the inlet of the existing lagoon system, and all other site work as shown on the Drawings and described in the Specifications. All work will be completed with the lagoon in operation. Limited suspension of some systems will be coordinated with the Engineer and Owner, as specified in Subsection 1.6. Payment for this work shall be Base Bid Items 1, 2, and 3.

- C. It shall be the responsibility of the Bidder to prepare the bid so that all materials, equipment and working arrangements shall harmoniously conform to the intent of the Contract Documents.

### 1.3 GENERAL INFORMATION

- A. This section covers the basis for payment for all Work. Work performed and the materials installed shall be in accordance with the Contract Documents.
- B. The Contract price paid for each Bid Item shall constitute full compensation for furnishing all material, equipment and supplies, performing all labor and operations for completion of Work as specified in the Contract Documents.
- C. Construction required to complete the Work as specified in these Contract Documents, but not specifically mentioned in this Section, shall be considered incidental to those Bid Items for which payment is made.
- D. Approximate existing ground elevations and topographic features indicated have been provided by the Owner. The Contractor shall satisfy itself as to the current existing site conditions prior to disturbing the original ground.
- E. No separate payment shall be made for work in the Specifications that is not specifically enumerated in the pay items listed in this section. All work not specified in these pay items shall be considered incidental to other items of work.
- F. The Contractor shall provide toilet facilities for workers.

### 1.4 QUALITY CONTROL

- A. The Contractor shall be responsible for project quality control, including hiring qualified personnel, and payment of all costs associated with the Contractor's Quality Control (CQC) program. Refer to each Technical Specification Section for details and requirements for submittals, installation/work plans, quality assurance plans, and field testing/reporting. The costs for the CQC program shall be incidental to the Work. The Engineer will provide overall project placement inspections.
- B. The Engineer shall have full access to any field reporting information, or installation procedure during the course of the work.

### 1.5 CONTRACTOR'S USE OF SITE AND PREMISES

- A. Limit use of Site and premises to allow ongoing operations of lagoons systems by Owner.
  - 1. The lagoon aeration systems shall not be shut down for more than a 12 hour interval.
  - 2. The lift station and pressure sewer line systems shall not be shut down for more than a 4-hour interval. The Contractor shall be responsible pumping and/or

hauling from lift station and pressure sewer line systems feeding the lagoon during any shut downs.

- B. Construction Plan: Before start of construction, submit construction plan regarding access to Work, use of Site, utility outages, use of Subcontractors, and phasing/sequencing of demolition, renovation, and the new Work for acceptance by Owner. After acceptance of plan, construction operations shall comply with accepted plan unless deviations are accepted by Owner in writing.

## 1.6 WORK SEQUENCE

- A. Construct Work in stages in order to accommodate continuous operations of the lagoon treatment systems during the construction period. Coordinate the construction schedule and operations with Engineer and Owner:

### 1. Phase 1: Construct the pre-treatment pond and sewer line.

- a. Construct the pre-treatment pond (including inlet and outlet controls) and sewer line from the pre-treatment pond to the existing lagoon inlet box. Coordinate with Owner to suspend operations of the pressure sewer system during this connection.

### 2. Phase 2: Construct the new baffle systems and aeration headers.

- a. Construct the replacement air manifold piping (from the Blower Building), and replace system valves within the Blower Building.
- b. Install support structures/anchor posts for aeration and baffle systems.
- c. Remove existing baffle systems from the existing lagoons (Cell #1 and Cell #2) and dispose in a permitted facility.
- d. Install the new baffle systems and connect to support structures.
- e. Install the replacement aeration system headers and connect to support structures.
- f. Connect the new aeration system to the new air manifold piping and Blower Building.

## 1.7 OWNER OCCUPANCY

- A. Owner will continue to operate the lagoon systems during entire period of construction.
- B. Cooperate with Owner to minimize conflict and to facilitate Owner's operations.
- C. Schedule the Work to accommodate lagoon system operations.

### 1.8 SITE HEALTH AND SAFETY PLAN

- A. The Contractor shall prepare a site-specific Health and Safety Plan.
- B. The Plan shall cover all work activities including demolition, dewatering, and all construction work.
- C. At least one copy of the Plan will be maintained at the work site at all times.

### 1.9 SPILL PREVENTION AND CLEANUP PLAN

- A. Prior to use of the site, the Contractor shall submit a detailed spill prevention and cleanup plan to the Engineer for his review and approval. The Contractor is responsible for preventing any spills during servicing of equipment. Vehicles/equipment parked for longer than twenty-four consecutive hours shall have drip pans placed under them. If a spill of any size does occur, the Contractor shall immediately clean up the spilled product and any contaminated soils associated with the spill. The Contractor shall notify the Engineer of any spills or leaks as soon as he is aware of them. The waste products and contaminated soils shall be removed from the site and disposed of properly. The notification and cleanup steps contained in these stipulations do not relieve the Contractor of his obligations under Alaska Statute AS46.03.755 and the Alaska Department of Conservation's Regulation, 18AAC78 Oil and Hazardous Substance Pollution Control.

### 1.10 RECORD DRAWINGS

- A. Contractor shall prepare Record Drawings of the completed construction project.
- B. The record drawings shall include, but not be limited to, the following:
  - 1. The location of the aeration and baffle equipment, including support structures.
  - 2. The pre-treatment pond side wall berms, inlet and outlet structures, and fencing.
  - 3. The sewer line connection between the pre-treatment pond and the lagoon inlet.
  - 4. The aeration manifold from the Blower Building.
- C. The Record Drawings shall be prepared in an approved AutoCAD format (Civil 3D, 2013 or later). Draft Drawings shall be submitted to the Engineer for review. The Drawings will not be considered completed until the City issues final approval in writing.

### 1.11 BASIS OF PAYMENT

- A. Bid Items:
  - 1. **Base Bid Item 1 - Site Mobilization and Demobilization, Site Restoration, Cleanup, and Record Drawings**



Payment for Mobilization and Demobilization shall be based on the Lump Sum (LS) stated in the Bid Proposal. This payment shall be full compensation for all costs of all materials, labor, equipment, and incidentals necessary to complete this item.

If the Contractor elects to demobilize no additional compensation will be given to re-mobilize. No adjustments shall be made in the contract price for mobilization due to changes in the original Base Bid amount.

Payment for Site Restoration, Cleanup, and Record Drawings will be based on the Lump Sum (LS) price stated in the Bid Proposal. Measurement will be made on the basis of percent complete, as approved by the Engineer. This payment shall be full compensation for all materials, labor, equipment, and incidentals necessary to cleanup, regrade, and generally restore the work site to a neat and clean condition.

Preparation of Record Drawings is an element of work covered by this pay item. Refer to Subsection 1.10 for details of the Record Drawings. Payment of the final 20% of the bid amount for Bid Items at the Owners discretion, be withheld until receipt of the record drawings.

**2. Base Bid Item 2 - Site Preparation and Construction of Pre-Treatment Pond**

Payment will be based on the Lump Sum (LS) price stated in the Bid Proposal. Measurement will be made on the basis of percent complete, as approved by the Engineer.

Work shall include, but not be limited to providing all materials, labor, equipment, and incidentals required to prepare the site and perform work necessary to construct the aeration and baffle systems. The work includes, but is not limited to the following:

- a. All clearing, grubbing identified in the plans;
- b. All excavation and embankment work;
- c. Installation of geomembrane liner.
- d. All piping, connections, and inlet/outlet control structures;
- e. Hauling and stockpiling materials or surplus materials;
- f. All other work not associated with the other pay items.

**3. Base Bid Item 3 - Installation of Aeration and Baffle Systems**

Payment will be based on the Lump Sum (LS) price stated in the Bid Proposal. Measurement will be made on the basis of percent complete, as approved by the Engineer.

Work shall include, but not be limited to providing all materials, labor, equipment, and incidentals required to prepare the site and perform work necessary to construct the Pretreatment Pond, inlet and outlet control structures, and sewer line connection to the lagoon. The work includes, but is not limited to the following:

- a. Demolition of existing baffles;
- b. Construction of new baffle systems and aeration systems,
- c. Construction of air manifold from Blower Building to Cell 1 and Cell 2 aeration headers;
- d. Replacement of valves in Blower Building.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

END OF SECTION 01 10 00

## SECTION 01 30 00 - PROJECT DATA SUBMITTALS

## PART 1 - GENERAL

## 1.1 DESCRIPTION

This section describes review procedures for Contractor submittals required by the Contract.

## PART 2 - CONTRACTOR'S RESPONSIBILITIES

## 2.1 COORDINATION

- A. The Contractor shall coordinate submittals with the work so that work will not be delayed. Submittals shall be sufficiently timely to allow normal processing time. The Engineer and Owner are under no obligation to expedite processing due to the Contractor's failure to anticipate submittal preparation and submittal time in his schedule.
- B. The Contractor shall coordinate and schedule different categories of submittals, so that one will not be delayed for lack of coordination with another. No extension of time will be allowed because of failure to properly schedule submittals. The Contractor shall not proceed with work related to a submittal until the submittal process is complete. This requires that submittals for review and comment shall be returned to the Contractor stamped "No Exceptions Taken" or "Make Corrections Noted".
- C. The Contractor shall certify on each submittal document that he has reviewed the submittal, verified field conditions, and complied with the Contract Documents. Submittals provided to the Engineer that are not stamped as being reviewed by the Contractor will be returned without review.
- D. The Contractor may authorize in writing a material or equipment supplier to deal directly with the Engineer or with the Owner with regards to a submittal. These dealings shall be limited to contract interpretations to clarify and expedite the work.

## 2.2 REQUESTS FOR SUBSTITUTION

- A. Requests for substitution for equipment specified by manufacturer or manufacturer's model number shall be in writing and shall be accompanied with sufficient information to permit the Engineer to identify the nature and scope of the request. Information to be provided, along with the requests for substitution, shall include:
  - 1. All submittal information required for the specified equipment, including all deviations from the specified requirements necessitated by the proposed substitution.
  - 2. Materials of construction, including material specifications and references.
  - 3. Dimensional drawings, showing required access and clearances, including any changes to the work required to accommodate the proposed substitution.
  - 4. Information and performance characteristics for all system components and ancillary devices to be furnished as a part of the proposed substitution.

5. A list of installations of the proposed substitution indicating application, location, owner and date of first issuance.
  - a. Coordination information, including a list of changes or modifications needed to other parts of the work and to construction performed by Owner and separate contractors that will be necessary to accommodate proposed substitution.
  - b. Detailed comparison of significant qualities of proposed substitution with those of the work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect, and specific features and requirements indicated.
  - c. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
  - d. Samples, where applicable or requested.
  - e. List of similar installations for completed projects with project names and addresses and names and addresses of architects and owners.
  - f. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
  - g. Research/evaluation reports evidencing compliance with building code in effect for project, from a model code organization acceptable to authorities having jurisdiction.
  - h. Detailed comparison of Contractor's Construction Schedule using proposed substitution with products specified for the work including effect on the overall contract time. If specified product or method of construction cannot be provided within the contract time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
  - i. Cost information, including a proposal of change, if any, in the contract sum.
  - j. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
  - k. Contractor's waiver of rights to additional payment or time that may be subsequently become necessary because of failure of proposed substitution to produce indicated results.
- B. Upon receipt of written application for substitution from the Contractor, including the information specified above, the Engineer will estimate the cost of evaluating the request and present the estimate to the Contractor. The Contractor is advised that the estimate is based upon the best information available to the Engineer at the time; however, the actual cost, based on time and expense, will be documented and applied in the final analysis of the substitution request. If the Contractor wishes to proceed with the request, he shall advise the Engineer in writing and submit sufficient additional information as may be requested by the Engineer. No evaluation will take place until such time as the Contractor has agreed to the estimate in writing and has authorized the Engineer to deduct the cost of the evaluation from monthly progress payments due the Contractor.
- C. The Engineer will notify the Contractor of acceptance or rejection of proposed substitutions within 30 days.
- D. The review by the Engineer of the proposed Substitution Request is only for conformance with the general design concept of the project, and does not extend to consideration of specific dimensions, structural integrity, safety, detailed installation and construction requirements, or any other obligation of the Contractor. Any action shown is subject to the requirements of the Contract Documents. The review of project data by the Engineer shall not relieve the Contractor from his/her obligation to perform fully all contract requirements, nor shall such

review give rise to any right of action or suit in favor of the Contractor or third persons against the Engineer or the Owner Form of Acceptance will be processed by issuance of a contract Change Order.

### PART 3 - TRANSMITTAL PROCEDURES

#### 3.1 GENERAL

- A. Unless otherwise specified, submittals shall be accompanied by transmittal forms to be provided by Engineer. A separate form shall be used for each specific item, class of material, equipment, and items specified in separate, discrete sections, for which the submittal is required. Submittal documents common to more than one piece of equipment shall be identified with all the appropriate equipment numbers. Submittals for various items shall be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.
- B. A unique number, sequentially assigned, shall be noted on the transmittal form accompanying each item submitted. Original submittal numbers shall have the following format: "XXX," where "XXX" is the sequential number assigned by the Contractor. Resubmittals shall have the following format: "XXX-Y," where "XXX" is the originally assigned submittal number and "Y" is a sequential letter assigned for resubmittals, i.e., A, B, or C being the 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> resubmittals, respectively. Submittal 25B, for example, is the second resubmittal of submittal 25.
- C. Deviation from Contract: If the Contractor proposes to provide material, equipment, or method of work which deviates from the project manual, he shall indicate so under "deviations" on the transmittal form accompanying the submittal copies. Contractor may be required to submit such deviations per the requirements of subsection 2.2 Requests for Substitutions.
- D. Submittal Completeness: Submittals which do not have all the information required to be submitted, including deviations, are not acceptable and will be returned without review.

#### 3.2 LIMITATIONS ON REVIEWS

- A. The Contractor's submittals for equipment and materials shall meet or exceed the requirements of the specifications. Accordingly, it is considered reasonable that the Contractor provide project data which are complete and acceptable, in the judgment of the Engineer, by the second submission of specific project data. The Owner reserves the right to and will withhold such amount from payments due to the Contractor to cover the cost of review by the Engineer of third and subsequent submittal submissions.

## PART 4 - REVIEW PROCEDURE

## 4.1 GENERAL

- A. The review procedure is based on the Contractor's guarantee that all features and characteristics not requiring submittals conform as specified. Review shall not extend to means, methods, techniques, sequences or procedures of construction, or to verifying quantities, dimensions, weights or gauges, or fabrication processes (except where specifically indicated or required by the Contract Documents) or to safety precautions or programs incident thereto. Review of a separate item, as such, will not indicate approval of the assembly in which the item functions.
- B. When the Contract Documents require a submittal, it shall be submitted to the Engineer in the format and quantity specified in the Specifications. The Engineer will compile review comments by the Owner and Sub-consultants before returning submittal comments to the Contractor. City reviews will be provided separately from the Engineer's review comments.
- C. The Contractor should allow 14 calendar days for each submittal or resubmittal review. Processing time may be extended in the case of more complicated submittals.
- D. The Engineer shall review and comment on submittals and return comments to the Contractor in electronic form (pdf file), unless physical paper size or submittal type prohibits legible scanning and reprinting. Upon final approval, one hard copy of the submittal will be returned to the Contractor. The Contractor shall be responsible for making any additional copies for his own use at his own expense.

## 4.2 SUBMITTAL FORMAT AND PROCEDURES

- A. Submittals may be transmitted electronically through email or other means provided they are in a commonly accepted file format (Adobe PDF) and no larger than 11 x 17. File sizes that are too large to be sent by email shall be transmitted another way. It shall be up to the Contractor to determine another means of transmitting such files.
- B. Submittals transmitted electronically will be logged the day received if sent during normal business hours. If electronic submission takes place after hours, or over the weekend, the submittal will be logged the next business day.
- C. Submittals intended to be transmitted electronically shall be reviewed by the Contractor prior to sending to the Engineer per subsection 2.1.C. Submission of product data straight from the manufacture's website or online catalog, with no notation of selected model, options or accessories will be returned, un-reviewed by the Engineer. Contractor review can be noted by digital stamp or scan of a red-line mark up.
- D. Large format submittals (physical paper size greater than 11" x 17") or bound product documentation not readily scanned shall have six (6) hardcopies submitted to the Engineer. The Engineer will review and return two (2) hardcopies to the Contractor in the same time duration as above. The submittal will be logged the day it is received by the Engineer.

#### 4.3 SUBMITTAL ACTION

- A. The returned submittal shall indicate one of the following actions:
1. If the review indicates that the material, equipment or work method complies with the project manual, submittal copies will be marked "No Exceptions Taken." In this event, the Contractor may begin to implement the work method or incorporate the material or equipment covered by the submittal.
  2. If the review indicates limited corrections are required, copies will be marked "Make Corrections Noted." The Contractor may begin implementing the work method or incorporating the material and equipment covered by the submittal in accordance with the noted corrections. Where submittal information will be incorporated in O&M data, a final corrected copy shall be provided by the Contractor.
  3. If the review reveals that the submittal is insufficient or contains incorrect data, copies will be marked "Revise and Resubmit. Except at his own risk, the Contractor shall not undertake work covered by the submittal until it has been revised, resubmitted and returned marked either "No Exceptions Taken" or "Make Corrections Noted."
  4. Informational submittals not subject to submittal review procedures shall be returned marked "Reference Only".
  5. Submittals received by the Engineer that are not required by the Specifications or have no bearing on the project will be marked "Submittal Not Required – No Action Taken" and returned without review by the Engineer.

### PART 5 - EFFECT OF REVIEW OF CONTRACTOR'S SUBMITTALS

#### 5.1 GENERAL

- A. The review by the Engineer of Shop Drawings, Project Data, and/or Samples is only for conformance with the general design concept of the project, and does not extend to consideration of specific dimensions, structural integrity, safety, detailed installation and construction requirements, or any other obligation of the Contractor. Any action shown is subject to the requirements of the Contract Documents. The review of project data by the Engineer shall not relieve the Contractor from his/her obligation to perform fully all contract requirements, nor shall such review give rise to any right of action or suit in favor of the Contractor or third persons against the Engineer or the Owner.
- B. Review of shop drawings, methods of work, or information regarding materials or equipment the Contractor proposes to provide, shall not relieve the Contractor of his responsibility for errors therein and shall not be regarded as an assumption of risks or liability by the Engineer or the Owner, or by any officer or employee thereof, and the Contractor shall have no claim under the contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed. A mark of "No Exceptions Taken" or "Make Corrections Noted" shall mean that the Owner has no objection to the Contractor, upon his own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

## PART 6 - SUBMITTAL LOG

## 6.1 GENERAL

- A. Prior to sending submittals, the contractor shall submit a submittal register outlining all the anticipated submittals for the project. The Engineer shall review, comment and return. Acceptance of the submittal register shall not prevent the engineer from requesting additional items at a later time during the contract period.
  
- B. The Engineer shall maintain a matrix-format Submittal Log which indicates the status of all submittals. Resubmittals shall be logged as separate entries on the log. The log shall be distributed to the Owner and Contractor weekly with the following information:
  - 1. Date of submittal.
  - 2. Date received by the Engineer.
  - 3. Date received by the Owner (if applicable).
  - 4. For submittals requiring review by a Subconsultant or the Building Official:
    - a. Date transmitted by Engineer to Subconsultant or Building Official
    - b. Identification of reviewing Subconsultant or Building Official
    - c. Date of receipt of review comments by Engineer
  - 5. Date compiled review comments transmitted to Owner for comment.
  - 6. Date of transmittal of review comments to Contractor by Engineer or Owner.
  - 7. Action taken (No Exceptions Taken, Rejected, etc.)
  - 8. Status (Processing Complete, Action by Engineer Pending, etc.)

## PART 7 - COMPILED SUBMITTALS

## 7.1 GENERAL

- A. Upon final approval of all submittals, the Contractor shall provide the Owner with one, bound hardcopy set and one electronic copy of all approved submittals. The submittal compilation shall be organized by specification section number with a table of contents, section tabs, etc. The electronic copy shall be a cohesive Adobe "pdf" document that is bookmarked.

END OF SECTION 01 30 00



## SECTION 01 32 16 - CONSTRUCTION PROGRESS SCHEDULE

## PART 1 - GENERAL

## 1.1 SECTION INCLUDES

- A. Submittals.
- B. Quality assurance.
- C. Format for network analysis schedules.
- D. Network analysis schedules.
- E. Bar chart schedules.
- F. Review and evaluation.
- G. Updating schedules.
- H. Distribution.

## 1.2 SUBMITTALS

- A. Within 10 days after date of Owner-Contractor Agreement, submit proposed preliminary schedule defining planned operations for 60 days of Work, with general outline for remainder of Work.
- B. Participate in review of preliminary and complete network diagrams jointly with Engineer.
- C. Submit updated schedules with each Application for Payment.
- D. Submit schedules under transmittal letter form specified in Section 01 33 00 - Submittal Procedures.
- E. Schedule Updates:
  - 1. Overall percent complete, projected and actual.
  - 2. Completion progress by listed activity and subactivity, to within five working days prior to submittal.
  - 3. Changes in Work scope and activities modified since submittal.
  - 4. Delays in submittals or resubmittals, deliveries, or Work.
  - 5. Adjusted or modified sequences of Work.
  - 6. Other identifiable changes.
  - 7. Revised projections of progress and completion.

### 1.3 QUALITY ASSURANCE

- A. Scheduler: Contractor's personnel specializing in CPM scheduling with two years' minimum experience in scheduling construction work of complexity comparable to the Project.

### 1.4 FORMAT FOR SCHEDULE

- A. Listings: Reading from left to right, in ascending order for each activity. Identify each activity with applicable Specification Section number.
- B. Diagram Sheet Size: 11 inches high x 17 inches wide.
- C. Scale and Spacing: To allow for notations and revisions.

### 1.5 BAR CHART SCHEDULES

- A. Format: Bar chart Schedule, to include at least:
  - 1. Identification and listing in chronological order of those activities reasonably required to complete the Work, including:
    - a. Subcontract Work.
    - b. Major equipment design, fabrication, factory testing, and delivery dates including required lead times.
    - c. Move-in and other preliminary activities.
    - d. Equipment and equipment system test and startup activities.
    - e. Project closeout and cleanup.
    - f. Work sequences, constraints, and milestones.
  - 2. Listings identified by Specification Section number.
  - 3. Identification of the following:
    - a. Horizontal time frame by year, month, and week.
    - b. Duration, early start, and completion for each activity and subactivity.
    - c. Critical activities and Project float.
    - d. Subschedules to further define critical portions of Work.

### 1.6 REVIEW AND EVALUATION

- A. Participate in joint review and evaluation of schedules with Owner at progress meeting.
- B. Evaluate Project status to determine Work behind schedule and Work ahead of schedule.

## 1.7 UPDATING SCHEDULES

- A. Maintain schedules to record actual start and finish dates of completed activities.
- B. Indicate progress of each activity to date of revision, with projected completion date of each activity. Update schedules to depict current status of Work.
- C. Identify activities modified since previous submittal, major changes in Work, and other identifiable changes.
- D. Upon approval of a Change Order, include the change in the next schedule submittal.
- E. Indicate changes required to maintain Date of Total Completion.
- F. Submit sorts as required to support recommended changes.
- G. Prepare narrative report to define problem areas, anticipated delays, and impact on schedule. Report corrective action taken or proposed and its effect.

## 1.8 DISTRIBUTION

- A. Following joint review, distribute copies of updated schedules to Contractor's Project site file, to Subcontractors, suppliers, Owner, and other concerned parties.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 - PRODUCTS - Not Used

PART 3 - EXECUTION - Not Used

END OF SECTION

## SECTION 01 60 00 - PRODUCT REQUIREMENTS

## PART 1 GENERAL

## 1.1 SECTION INCLUDES

- A. Products.
- B. Product delivery requirements.
- C. Product storage and handling requirements.
- D. Product options.
- E. Equipment electrical characteristics and components.

## 1.2 PRODUCTS

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

## 1.3 PRODUCT DELIVERY REQUIREMENTS

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

## 1.4 PRODUCT STORAGE AND HANDLING REQUIREMENTS

- A. Store and protect products according to manufacturer's instructions.
- B. Store products with seals and labels intact and legible.
- C. Store sensitive products in weathertight, climate-controlled enclosures in an environment suitable to product.

- D. For exterior storage of fabricated products, place products on sloped supports aboveground.
- E. Provide off-Site storage and protection when Site does not permit on-Site storage or protection.
- F. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- G. Store loose granular materials on solid flat surfaces in well-drained area. Prevent mixing with foreign matter.
- H. Provide equipment and personnel to store products; use methods to prevent soiling, disfigurement, or damage.
- I. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.

## PART 2 PRODUCTS

### 2.1 BUY AMERICAN PREFERENCE.

- A. General. The Contractor shall comply with 49 USC Section 50101. The Contractor shall ensure that all steel and iron used on federally funded projects are wholly produced in the United States and are of 100% U.S. Materials, unless:
  - 1. The product is listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation subpart 25.108.
- B. Bid Proposal. The bidder must complete and submit with their bid the Certificate of Buy American Compliance (Form AIS-3) provided in the bid documents. The Department will reject as nonresponsive any bid that does not include a completed Certificate of Buy American Compliance.
- C. Material Submittals. During performance of the Contract, the Contractor must provide a Material Submittal for Buy American Compliance (Form AIS-4), from the supplier for each steel or manufactured good, prior to incorporating any steel or manufactured good into the project. The supplier certifying Form AIS-4 may be the original manufacturer, fabricator, vendor, or subcontractor; provided the supplier has sufficient control and knowledge of the manufacturing process to accept responsibility and certify full and complete conformance with 49 USC Section 50101. Provide mill certificates or other material documentation when required by the Engineer. False statements may result in criminal penalties prescribed under AS 36.30.687 and Title 18 USC Section 1001.

## PART 3 EXECUTION - Not Used

END OF SECTION

## SECTION 01 70 00 - EXECUTION AND CLOSEOUT REQUIREMENTS

## PART 1 - GENERAL

## 1.1 SECTION INCLUDES

- A. Closeout procedures.
- B. Starting of systems.
- C. Demonstration and instructions.
- D. Project record documents.
- E. Operation and maintenance data.
- F. Manual for equipment and systems.
- G. Spare parts and maintenance products.
- H. Product warranties and product bonds.
- I. Examination.
- J. Preparation.
- K. Execution.
- L. Protecting installed construction.
- M. Final cleaning.

## 1.2 CLOSEOUT PROCEDURES

- A. Prerequisites to Substantial Completion: Complete following items before requesting Certification of Substantial Completion, either for entire Work or for portions of Work:
  - 1. Submit maintenance manuals, Project record documents, and other similar final record data in compliance with this Section.
  - 2. Complete facility startup, testing, adjusting, balancing of systems and equipment, demonstrations, and instructions to Owner's operating and maintenance personnel as specified in compliance with this Section.
  - 3. Conduct inspection to establish basis for request that Work is substantially complete. Create comprehensive list (initial punch list) indicating items to be completed or corrected, value of incomplete or nonconforming Work, reason for being incomplete, and

date of anticipated completion for each item. Include copy of list with request for Certificate of Substantial Completion.

4. Obtain and submit releases enabling Owner's full, unrestricted use of Project and access to services and utilities. Include certificate of occupancy, operating certificates, and similar releases from authorities having jurisdiction and utility companies.
5. Deliver tools, spare parts, extra stocks of material, and similar physical items to Owner.
6. Make final change-over of locks and transmit keys directly to Owner. Advise Owner's personnel of change-over in security provisions.
7. Discontinue or change over and remove temporary facilities and services from Project Site, along with construction tools, mockups, and similar elements.
8. Perform final cleaning according to this Section.

B. Substantial Completion Inspection:

1. When Contractor considers Work to be substantially complete, submit to Owner:
  - a. Written certificate that Work, or designated portion, is substantially complete.
  - b. List of items to be completed or corrected (initial punch list).
2. Within seven days after receipt of request for Substantial Completion, Owner will make inspection to determine whether Work or designated portion is substantially complete.
3. Should Owner determine that Work is not substantially complete:
  - a. Owner will promptly notify Contractor in writing, stating reasons for its opinion.
  - b. Contractor shall remedy deficiencies in Work and send second written request for Substantial Completion to Owner.
  - c. Owner will reinspect Work.
  - d. Redo and Inspection of Deficient Work: Repeated until Work passes Owner's inspection.
4. When Owner finds that Work is substantially complete, Owner will:
  - a. Prepare Certificate of Substantial Completion on, accompanied by Contractor's list of items to be completed or corrected as verified and amended by Owner (final punch list).
  - b. Submit Certificate to Owner and Contractor for their written acceptance of responsibilities assigned to them in Certificate.
5. After Work is substantially complete, Contractor shall:
  - a. Allow Owner occupancy of Project under provisions stated in Certificate of Substantial Completion.
  - b. Complete Work listed for completion or correction within time period stipulated.

C. Prerequisites for Final Completion: Complete following items before requesting final acceptance and final payment.

1. When Contractor considers Work to be complete, submit written certification that:
  - a. Contract Documents have been reviewed.
  - b. Work has been examined for compliance with Contract Documents.

- c. Work has been completed according to Contract Documents.
    - d. Work is completed and ready for final inspection.
  2. Submittals: Submit following:
    - a. Final punch list indicating all items have been completed or corrected.
    - b. Final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
    - c. Specified warranties, workmanship/maintenance bonds, maintenance agreements, and other similar documents.
    - d. Accounting statement for final changes to Contract Sum.
    - e. Contractor's affidavit of payment of debts and claims on AIA G706 - Contractor's Affidavit of Payment of Debts and Claims.
    - f. Contractor affidavit of release of liens on AIA G706A - Contractor's Affidavit of Release of Liens.
    - g. Consent of surety to final payment on AIA G707 - Consent of Surety to Final Payment Form.
  3. Perform final cleaning for Contractor-soiled areas according to this Section.
- D. Final Completion Inspection:
  1. Within seven days after receipt of request for final inspection, Owner will make inspection to determine whether Work or designated portion is complete.
  2. Should Owner consider Work to be incomplete or defective:
    - a. Owner will promptly notify Contractor in writing, listing incomplete or defective Work.
    - b. Contractor shall remedy stated deficiencies and send second written request to Owner that Work is complete.
    - c. Owner will reinspect Work.
    - d. Redo and Inspection of Deficient Work: Repeated until Work passes Owner's inspection.

### 1.3 STARTING OF SYSTEMS

- A. Coordinate schedule for startup of various equipment and systems.
- B. Notify Owner seven days prior to startup of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions which may cause damage.
- D. Verify that tests, meter readings, and electrical characteristics agree with those required by equipment or system manufacturer.
- E. Verify that wiring and support components for equipment are complete and tested.



- F. Execute startup under supervision of manufacturer's representative or Contractors' personnel according to manufacturer's instructions.
- G. When specified in individual Specification Sections, require manufacturer to provide authorized representative who will be present at Site to inspect, check, and approve equipment or system installation prior to startup and will supervise placing equipment or system in operation.
- H. Submit a written report according to Section 01 33 00 - Submittal Procedures that equipment or system has been properly installed and is functioning correctly.

#### 1.4 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of products to Owner's personnel two weeks prior to date of final inspection.
- B. Demonstrate Project equipment by authorized manufacturer's representative who is knowledgeable about the Project.
- C. Use operation and maintenance manuals as basis for instruction. Review contents of manual with Owner's personnel in detail to explain all aspects of operation and maintenance.
- D. Demonstrate startup, operation, control, adjustment, troubleshooting, servicing, maintenance, and shutdown of each item of equipment at scheduled time, at designated location.
- E. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
- F. Required instruction time for each item of equipment and system is specified in individual Specification Sections.

#### 1.5 PROJECT RECORD DOCUMENTS

- A. Maintain on Site one set of the following record documents; record actual revisions to the Work:
  - 1. Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change Orders and other modifications to the Contract.
  - 5. Reviewed Shop Drawings, product data, and Samples.
  - 6. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.

- D. Record information concurrent with construction progress, not less than weekly.
- E. Specifications: Legibly mark and record, at each product Section, description of actual products installed, including the following:
  - 1. Manufacturer's name and product model and number.
  - 2. Product substitutions or alternates used.
  - 3. Changes made by Addenda and modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction as follows:
  - 1. Include Contract modifications such as Addenda, supplementary instructions, change directives, field orders, minor changes in the Work, and change orders.
  - 2. Include locations of concealed elements of the Work.
  - 3. Identify depth of buried utility lines and provide dimensions showing distances from permanent facility components that are parallel to utilities.
  - 4. Dimension ends, corners, and junctions of buried utilities to permanent facility components using triangulation.
  - 5. Identify and locate existing buried or concealed items encountered during Project.
  - 6. Measured depths of foundations in relation to finish [first] [main] floor datum.
  - 7. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
  - 8. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
  - 9. Field changes of dimension and detail.
  - 10. Details not on original Drawings.
- G. Submit PDF electronic files of marked-up documents to Owner before Substantial Completion.

#### 1.6 OPERATION AND MAINTENANCE DATA

- A. Submit in PDF composite electronic indexed file.
- B. Submit data bound in 8-1/2 x 11-inch text pages, three D side ring binders with durable plastic covers.
- C. Prepare binder cover with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS," title of Project, and subject matter of binder when multiple binders are required.
- D. Internally subdivide binder contents with permanent page dividers, logically organized as described below; with tab titling clearly printed under reinforced laminated plastic tabs.
- E. Contents: Prepare table of contents for each volume, with each product or system description identified, typed on white paper, in three parts as follows:

1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by Specification Section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Include the following:
  - a. Significant design criteria.
  - b. List of equipment.
  - c. Parts list for each component.
  - d. Operating instructions.
  - e. Maintenance instructions for equipment and systems.
  - f. Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
  - g. Safety precautions to be taken when operating and maintaining or working near equipment.
3. Part 3: Project documents and certificates, including the following:
  - a. Shop Drawings and product data.
  - b. Certificates.
  - c. Originals of warranties.

#### 1.7 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Owner will review draft and return one copy with comments.
- B. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit documents within ten days after acceptance.
- C. Submit one copy of completed volumes 15 days prior to final inspection. Draft copy will be reviewed and returned after final inspection, with Owner comments. Revise content of document sets as required prior to final submission.
- D. Submit two sets of revised final volumes within ten days after final inspection.
- E. Submit in PDF composite electronic indexed file of final manual within ten days after final inspection.
- F. Each Item of Equipment and Each System: Include description of unit or system and component parts. Identify function, normal operating characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and model number of replaceable parts.
- G. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- H. Include color-coded wiring diagrams as installed.

- I. Operating Procedures: Include startup, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shutdown, and emergency instructions. Include summer, winter, and special operating instructions.
- J. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and troubleshooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- K. Include servicing and lubrication schedule and list of lubricants required.
- L. Include manufacturer's printed operation and maintenance instructions.
- M. Include sequence of operation by controls manufacturer.
- N. Include original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- O. Include control diagrams by controls manufacturer as installed.
- P. Include Contractor's coordination drawings with color-coded piping diagrams as installed.
- Q. Include charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- R. Include list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- S. Include test and balancing reports as specified in Section 01 40 00 - Quality Requirements.
- T. Additional Requirements: As specified in individual product Specification Sections.
- U. Include listing in table of contents for design data with tabbed dividers and space for insertion of data.

## 1.8 SPARE PARTS AND MAINTENANCE PRODUCTS

- A. Furnish spare parts, maintenance, and extra products in quantities specified in individual Specification Sections.
- B. Deliver to and place in location as directed by Owner; obtain receipt prior to final payment.

## 1.9 PRODUCT WARRANTIES AND PRODUCT BONDS

- A. Obtain warranties by responsible Subcontractors, suppliers, and manufacturers within ten days after completion of applicable item of Work.

- B. Execute and assemble transferable warranty documents from Subcontractors, suppliers, and manufacturers.
- C. Verify documents are in proper form, contain full information, and are notarized.
- D. Co-execute submittals when required.
- E. Include table of contents and assemble in three D side ring binder with durable plastic cover.
- F. Submit prior to final Application for Payment.
- G. Time of Submittals:
  - 1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within ten days after acceptance.
  - 2. Make other submittals within ten days after date of Substantial Completion, prior to final Application for Payment.
  - 3. For items of Work for which acceptance is delayed beyond Substantial Completion, submit within ten days after acceptance, listing date of acceptance as beginning of warranty or bond period.

## PART 2 - PRODUCTS - Not Used

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that existing Site conditions and substrate surfaces are acceptable for subsequent Work. Beginning new Work means acceptance of existing conditions.
- B. Verify that existing substrate is capable of structural support or attachment of new Work being applied or attached.
- C. Examine and verify specific conditions described in individual Specification Sections.
- D. Verify that utility services are available with correct characteristics and in correct locations.

### 3.2 PREPARATION

- A. Clean substrate surfaces prior to applying next material or substance according to manufacturer's instructions.
- B. Seal cracks or openings of substrate prior to applying next material or substance.

- C. Apply manufacturer-required or -recommended substrate primer, sealer, or conditioner prior to applying new material or substance in contact or bond.

### 3.3 EXECUTION

- A. Comply with manufacturer's installation instructions, performing each step in sequence. Maintain one set of manufacturer's installation instructions at Project Site during installation and until completion of construction.
- B. When manufacturer's installation instructions conflict with Contract Documents, request clarification from Architect/Engineer before proceeding.
- C. Verify that field measurements are as indicated on approved Shop Drawings or as instructed by manufacturer.
- D. Secure products in place with positive anchorage devices designed and sized to withstand stresses, vibration, physical distortion, or disfigurement.
  - 1. Secure Work true to line and level and within specified tolerances, or if not specified, industry-recognized tolerances.
  - 2. Physically separate products in place, provide electrical insulation, or provide protective coatings to prevent galvanic action or corrosion between dissimilar metals.
  - 3. Exposed Joints: Provide uniform joint width and arrange to obtain best visual effect. Refer questionable visual-effect choices to Architect/Engineer for final decision.
- E. Allow for expansion of materials and building movement.
- F. Climatic Conditions and Project Status: Install each unit of Work under conditions to ensure best possible results in coordination with entire Project.
  - 1. Isolate each unit of Work from incompatible Work as necessary to prevent deterioration.
  - 2. Coordinate enclosure of Work with required inspections and tests to minimize necessity of uncovering Work for those purposes.
- G. Mounting Heights: Where not indicated, mount individual units of Work at industry recognized standard mounting heights for particular application indicated.
  - 1. Refer questionable mounting heights choices to Architect/Engineer for final decision.
  - 2. Elements Identified as Accessible to Handicapped: Comply with applicable codes and regulations.
- H. Adjust operating products and equipment to ensure smooth and unhindered operation.
- I. Clean and perform maintenance on installed Work as frequently as necessary through remainder of construction period. Lubricate operable components as recommended by manufacturer.

### 3.4 PROTECTING INSTALLED CONSTRUCTION

- A. Protect installed Work and provide special protection where specified in individual Specification Sections.
- B. Provide temporary and removable protection for installed products. Control activity in immediate Work area to prevent damage.
- C. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- D. Use durable sheet materials to protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects.
- E. Prohibit traffic or storage upon waterproofed or roofed surfaces. When traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- F. Prohibit traffic from landscaped areas.

### 3.5 FINAL CLEANING

- A. Execute final cleaning prior to final Project assessment.
- B. Clean equipment and fixtures to sanitary condition with appropriate cleaning materials.
- C. Remove waste and surplus materials, rubbish, and construction facilities from Site.

END OF SECTION

## SECTION 02 41 00 - DEMOLITION AND DECONSTRUCTION

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. This Section includes:
  - 1. Demolishing designated equipment and fixtures.
  - 2. Protecting items designated to remain.
  - 3. Removing demolished materials.

## 1.2 SUBMITTALS

- A. Demolition Schedule: Indicate overall schedule and any interruptions required for utility and building services.

## 1.3 PROJECT CONDITIONS

- A. Minimize interference with lagoon operations during all demolition activities.
- B. Cease operations immediately if structure appears to be in danger of failure and notify Architect/Engineer. Do not resume operations until directed.

## PART 2 - PRODUCTS (NOT USED)

## PART 3 - EXECUTION

## 3.1 PREPARATION

- A. Notify affected utility companies before starting work and comply with their requirements.
- B. Mark location and termination of utilities.
- C. Erect and maintain temporary barriers and security devices, including warning signs, lights, and similar measures, for protection of the public and existing infrastructure indicated to remain.

## 3.2 SALVAGE REQUIREMENTS

- A. Coordinate with Owner to identify components and equipment required to be removed and delivered to Owner.
- B. Protect designated salvage items from demolition operations until items can be removed.



- C. Carefully remove components and equipment indicated to be salvaged.
- D. Disassemble as required to permit removal from the site.
- E. Package small and loose parts to avoid loss.
- F. Mark equipment and packaged parts to permit identification and consolidation of components of each salvaged item.
- G. Deliver salvaged items to Owner. Obtain signed receipt from Owner.

### 3.3 DEMOLITION

- A. Conduct demolition at locations as indicated in the drawings.
- B. Conduct demolition to minimize interference with adjacent areas.
- C. Maintain protected egress from and access to adjacent existing sites at all times.
- D. Do not close or obstruct roadways without permits.
- E. Cease operations immediately if structure appears to be in danger of failure and notify Architect/Engineer.
- F. Disconnect and remove designated utilities within demolition areas.
- G. Demolish in orderly and careful manner. Protect existing infrastructure indicated to remain.
- H. Carefully remove components indicated to be reused.
  - 1. Disassemble components as required to permit removal.
  - 2. Package small and loose parts to avoid loss.
  - 3. Mark components and packaged parts to permit reinstallation.
  - 4. Store components, protected from construction operations, until reinstalled.
- I. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.
- J. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.
- K. Remove temporary Work.

END OF SECTION 02 41 00

SECTION 31 00 00 - EARTHWORK REVISION 1

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes general requirements for earthwork, including controlled fill, compaction, grading, imported materials and backfill, and accessories.
- B. Work under Specification SECTION 31 23 00 – EXCAVATION is directly related to this Specification.
- C. See SECTION 31 05 19 for geomembrane specifications.
- D. No petroleum product storage tanks will be allowed on site without prior written approval of the Engineer.

## 1.2 REFERENCES

- 1. ASTM D1557 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort.
- 2. ASTM D2922 - Standard Test Method for Density of Soil and Soil-Aggregate in Place by Nuclear Methods.

## 1.3 DEFINITIONS

- A. Imported Material: Materials obtained from sources offsite, suitable for specified use.
- B. Influence Area: Area within planes sloped downward and outward at 60-degree angle from horizontal measured from:
  - 1. 1 foot outside outermost edge at base of foundations or slabs.
  - 2. 1 foot outside outermost edge at surface of roadways or shoulder.
  - 3. 0.5 foot outside exterior at spring line of pipes or culverts.
- C. Lift: Loose (uncompacted) layer of material.
- D. Prepared Ground Surface: Ground surface after completion of required clearing, excavation to grade, and subgrade preparation.
- E. Prepared Subgrade: The ground surface after clearing, grading, excavation, smoothing, and/or compaction to meet the requirements for placement of the next overlying layer.
- F. Processed Material: Materials processed onsite that are suitable for specified use. The only materials that may be processed from onsite materials are “Suitable Materials”. All other materials must be imported to the site.

- G. Proof Rolling: Rolling a soil or rock surface with a minimum of 3 passes with compaction equipment as specified and reviewed by the Engineer for the purpose of detecting soft or loose areas.
- H. Select Backfill Material: Material imported or processed from on-site excavation.
- I. Stockpiles: Excavated material placed at a designated site for future use by Lagoon Operations staff, or the Contractor's temporary stockpile location for imported material.
- J. Suitable Material: Material imported or excavated from the cut areas, which is suitable for use in constructing fills and meets the requirements of Section 2.2.
- K. Unsuitable Material: Material from project excavations which, in the opinion of the Engineer, is not suitable for use in backfill or compacted fills.
- L. Well-Graded:
  - 1. A mixture of particle sizes with no specific concentration or lack thereof of one or more sizes.
  - 2. Does not define numerical value that must be placed on coefficient of uniformity, coefficient of curvature, or other specific grain size distribution parameters.
  - 3. Used to define material type that, when compacted, produces a strong and relatively incompressible soil mass free from detrimental voids.

#### 1.4 SUBMITTALS

- A. A Construction Plan shall be submitted to the Engineer at least 15 days prior to any earthwork activities. The Construction Plan shall, at a minimum, include the following:
  - 1. Proposed source(s) of Imported Materials for acceptance.
  - 2. Proposed soil processing, placement, compaction, and moisture control equipment, including equipment catalog with weight, dimensions, ground pressure exerted by track or rubber tire machines expressed in (psi), and operating data.
  - 3. Proposed work schedule.
  - 4. Proposed method of protecting work, to include temporary drainage measures and freeze protection.
  - 5. Proposed excavation, stockpiling, re-grading and staging plan describing handling and transport of on-site and off-site materials.
  - 6. Proposed proof rolling method and equipment for each sub-grade condition.
  - 7. Submit plans showing the proposed methods of removing overburden, overburden stockpiles and methods of placing overburden onto the outside of the pretreatment pond berm.
- B. Include submittals for the following materials:
  - 1. Geotextile fabric.
  - 2. Geomembrane liner.
  - 3. Imported fill materials.
- C. A Quality Assurance Plan shall be submitted to the Engineer at least 15 days prior to any earthwork activities. The Quality Assurance Plan shall, at a minimum, included:
  - 1. Items listed in Section 1.4.

### 1.5 QUALITY ASSURANCE

- A. Notify Engineer when:
  - 1. Facility is ready for backfilling or filling, and whenever backfilling or filling operations are resumed after a period of inactivity.
  - 2. Soft or loose subgrade materials are encountered wherever fill or backfill is to be placed.
  - 3. Fill or backfill material appears to be deviating from Specifications.
  - 4. Fill or backfill is compacted and ready for testing.
- B. Referenced Standards: This section incorporates by reference the latest revision of the following documents. It is part of this section as specified and modified. In case of conflict between the requirements of this section and that of the listed documents, the requirements of this section shall prevail:

### 1.6 SEQUENCING AND SCHEDULING

- A. Complete applicable Work specified in Specification SECTION 31 23 00 – EXCAVATION before placing fill or backfill, except as specified.
- B. Notify Engineer at least 24 hours prior to commencement of filling and compaction work.

### 1.7 PROTECTION

- A. All roads, grading, structures, utilities, wells, survey monuments, and other improvements not specifically designated to be cleared, removed, stripped or altered as a part of the work shall be protected from damage throughout the construction period. Any damage caused by the Contractor, his employees, agents, or any lower tiered subcontractors shall be immediately repaired and re-established to the original condition and to the satisfaction of the Engineer at no additional cost to the City.

## PART 2 - PRODUCTS

### 2.1 SOURCE QUALITY CONTROL

- A. All tests necessary for the Contractor to locate acceptable sources of specified materials shall be the Contractor's responsibility, including obtaining necessary samples. Tests shall be conducted by an approved independent testing lab retained by the Contractor. All imported materials must be reviewed and approved by the Engineer prior to transport to site.

### 2.2 MATERIALS

- A. Pipe Bedding – Aggregate with a maximum particle size of 2" containing no muck, frozen materials, roots, sod or other deleterious matter with a plasticity index not greater than 6 as tested by ATM 204 and ATM 304. Meet the following gradation as tested by ATM 304:

<u>Sieve</u>	<u>Percent Passing by Weight</u>
No. 4	20-60%
No. 200	0-6%, determined on the minus 3-inch portion of the sample

- B. Berm Fill/Trench Backfill – Earth, sand, gravel, rock, or combinations thereof containing no muck, peat, frozen material, roots, sod or other deleterious matter, and is compactable in accordance with Section 3.3.

### 2.3 ACCESSORIES

- A. Geotextile Fabric
- Per ADOT&PF SSHC – 729-2.01 Geotextile, Separation, meeting AASHTO M288 for Separation, except provide a minimum permittivity of 0.05 sec<sup>-1</sup>.
- B. Geomembrane Liner
- ~~Layfield, Hazard 100. layfieldgroup.com. (619) 273-5006.~~
  - ~~Substitutions meeting the above requirements shall be submitted to the Engineer in writing for approval. SEE SECTION 31 05 19.~~
- C. Board Insulation
- Dow Highload 40 Extruded Polystyrene Insulation, or approved equal.
- D. Detectable Warning Tape
- Minimum five (5) mil, foil backed, six inches (6”) wide vinyl tape, colored green, with “Caution Buried Sewer Line Below” continuously printed in black along the tape length. Minimum eighteen inches (18”) and maximum thirty six inches (36”) above the pipe.

## PART 3 - EXECUTION

### 3.1 GENERAL

- A. Keep placement surfaces free of water, debris, and foreign material during placement and compaction of fill and backfill materials.
- B. Place and spread fill and backfill materials in horizontal lifts of uniform thickness not to exceed eight (8) inches, in a manner that avoids segregation, and compact each lift before placing succeeding lifts. Slope lifts only where necessary to conform to final grades or as necessary to keep placement surfaces drained of water.
- C. Provide compaction equipment appropriate for the material types. Operate and maintain compaction equipment in accordance with the manufacturer’s instructions and recommendations. If inadequate densities are obtained, provide larger and/or different type equipment at no additional cost to the Owner.
- D. Do not place fill or backfill if material is frozen, or if surface upon which fill or backfill is to be placed is frozen.
- E. Tolerances:

1. Final Lines and Grades: Within a tolerance of 0.1 foot unless dimensions or grades are shown or specified otherwise.
  2. Grade to establish and maintain slopes and drainage as shown. Reverse slopes or grading that creates closed depressions are not permitted.
- F. Settlement: Correct and repair any subsequent damage caused by settlement of fill or backfill material.
- G. Water will not be available at the site. The Contractor shall provide equipment and labor to collect and haul the water, which is incidental to the work.
- H. Coordinate haul routes with the lagoon operator.
- I. Prepared subgrade shall be compacted to a minimum 92% maximum dry density prior to placing additional fill or materials.

### 3.2 SITE TESTING

- A. Control Section: The Engineer may approve the use of control section for establishment of acceptable compaction efforts for each material type. The purpose of this method is to establish an acceptable placement / watering / roller pattern that will achieve the required compaction for the project.

If at any time the Engineer feels that the control section is no longer valid for the type or location of compaction efforts the Engineer may require compaction test or the re-establishment of a new control section at no cost to the owner. If the contractor wishes to use Control Sections these must be established in in the contractor's Quality Assurance Plan

### 3.3 PLACING AND SPREADING FILL MATERIAL

- A. Refer to Drawings for details.
1. Use Suitable Material, See Articles 2.2.
  2. Maximum 8-inch Lifts.
  3. Place Fill to the lines and grades shown on the Drawings.
  4. Compact Material to 95% maximum dry density or greater in traffic areas and to 90% or greater elsewhere.
- B. Stockpile Suitable Material that is suitable for use as select backfill in temporary stockpile areas within the project limits as approved by the Engineer until material is used in the construction.
- C. Construct Selected Material fills with moisture and density control unless the Engineer determines that such controls are not feasible.
- D. Compaction with moisture and density control. Adjust the moisture content of the Selected Material to within 2% of the optimum moisture content and compact each layer as indicated in Article 3.3 A.
- E. Grade in a manner that shall promote positive site drainage and that shall direct drainage away from the work and prevent ponding.

- F. Uniformly grade areas to provide a finished surface that is smooth, compacted and free of irregularities. Comply with compaction requirements and grade to cross sections, lines and elevations indicated. Organic material placed on the outside of the cell should be even in appearance and have no protrusions greater than 6 inches from the surface.
- G. Confine stockpiles to within approved work areas. Do not obstruct roadways.

3.4 ACCESSORIES

- A. Install per the drawings and manufacturers recommendations.

END OF SECTION 31 00 00

## SECTION 310519 – GEOMEMBRANE

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes: Manufacture, storage, delivery, and installation of geomembrane materials as shown in the drawings or as directed by the Engineer.

## 1.2 DEFINITIONS

- A. Definitions shall be in accordance with ASTM D4439, unless otherwise indicated.
- B. Bridging: When the geomembrane becomes suspended over the subgrade due to expansion or contraction of the material or poor installation.
- C. Geomembrane Subgrade: The surface upon which the geomembrane is placed.
- D. Geosynthetics: Geotextiles, Geosynthetic Clay Liner (GCL), or geomembrane.
- E. Installer: The party responsible for transporting, storing, handling, deploying, installing, and protecting the geomembrane.
- F. Manufacturer: The party responsible for the production of the GEOMEMBRANE in accordance with this Specification.
- G. Overlap: Distance measured perpendicular from overlapping edge of one sheet to underlying edge of adjacent sheet.
- H. Panel: The unit area of geomembrane that will be seamed in the field. A panel is a roll or portion of a roll without any seams.

## 1.3 SUBMITTALS

- A. Prior to shipping geomembrane to the site, submit the following:
  - 1. Certificate of Conformance and Sample: Prior to shipping to the site, the Contractor shall submit a certificate or affidavit signed by a legally authorized official of the Manufacturer for the geomembrane attesting that the geomembrane meets the physical and manufacturing requirements stated in these Specifications. The Contractor shall also submit a sample of the geomembrane to be used. The sample shall be labeled with the product name and be accompanied by the Manufacturer's specifications.
  - 2. Shipping, Handling, and Storage Instructions: The Manufacturer's plan for shipping, handling, and storage shall be submitted for review.
  - 3. Installation Procedures: Submit installation plan for carrying out the work. Furnish copies of the delivery tickets or other approved receipts as evidence for materials received that will be incorporated into the construction.
- B. Upon completion of the geomembrane installation, the Contractor shall submit the following: Completed material performance warranty.
- C. Installation plan describing the proposed methods and equipment for geomembrane deployment, panel layout, seaming, repair, and protection.



- D. Manufacturer's and Installer's warranties.
- E. Record Drawings showing all changes from the approved installation plan drawings. The record drawings shall identify and show the dimensioned location of each seam, repair, penetration, and sample taken from the installed geomembrane.

#### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. Delivery, storage, and handling of the geomembrane shall conform to ASTM D4873 and the manufacturer's recommendations.
- B. Each roll shall be labeled with the lot number, roll number, and other information necessary to identify it for inventory and CQC and CQA testing.
- C. Upon delivery at the site, the Contractor and the Engineer shall inspect the surfaces of all rolls for defects and for damage. This inspection shall be conducted without unrolling rolls unless defects or damages are found or suspected. The Engineer will determine:
  - 1. Rolls, or portions thereof, which should be rejected and removed from the site because they have severe flaws.
  - 2. Rolls or factory panels which include repairable flaws.
  - 3. Rolls that are not properly labeled. No unlabeled rolls shall be used for any application. Unlabeled rolls shall be removed from the site and replaced at the Contractor's expense.
- D. Immediately repair any damaged protective covering. Preserve integrity and legibility of geomembrane roll labels.
- E. Store and protect geomembrane from dirt, water, vandalism, and other sources of damage.
- F. Handling:
  - 1. Use appropriate handling equipment to load, move, and deploy geomembrane rolls. Appropriate handling equipment includes cloth chokers, spreader bars and roll bars.
  - 2. Dragging panels on ground surface shall not be permitted.

#### 1.5 QUALIFICATIONS

- A. Manufacturer Qualifications: The manufacturer shall be a commercial entity normally engaged in manufacture of geomembranes for waste containment applications and shall have:
  - 1. Manufactured at least 10 million square feet of geomembranes.
  - 2. Have at least 5 years continuous experience in the manufacturing of geomembrane.
- B. The geomembrane Installer shall have at least 5 years' experience in the installation of HDPE geomembrane, for 5 or more completed facilities.

#### 1.6 WARRANTY

- A. Provide a manufacturer's warranty for the geomembrane material in compliance with provisions of the Standard General Provisions of the Contract and these

Specifications. Provide a minimum 10-year warranty for the materials against deterioration.

- B. Provide an installation warranty for the geomembrane material in compliance with the Standard General Provisions of the Contract. Provide a minimum 2-year non-pro rata warranty for the installation against defects.
- C. The warranties shall be provided to the Owner as purchaser and shall be signed by authorized representatives of the geomembrane Manufacturer and Installer.
- D. The manufacturer's standard warranty must be received as a condition of Liner Material approval; and, the installer's warranty must be received as a condition for payment for liner installed.

## PART 2 - PRODUCTS

### 2.1 GEOMEMBRANE

- A. Material: 9146 XR-5 ULT, 50 mil thick
- B. Suppliers: All geomembrane rolls shall be furnished by one supplier.
- C. Geomembrane shall be manufactured by Seaman Corporation or approved equal.

### 2.2 GEOMEMBRANE SHEET

- A. Provide finished product free from blemishes, holes, pin holes, bubbles, blisters, excessive gels, undispersed resins, and/or carbon black, contamination by foreign matter and nicks or cuts on edges.
- B. The physical, mechanical, and environmental properties of the finished sheet shall meet or exceed the values specified in Table 1:

<b>TABLE 1. Geomembrane Required Properties</b>		
<b>Property</b>	<b>Required Value<sup>1</sup></b>	<b>Test Method</b>
Thickness	50 mil	ASTM D751
Weight	$46.0 \pm \text{oz/yd}^2$	ASTM D754
Tongue Tear	90/90 lb <sub>f</sub>	ASTM D751
Trapezoidal Tear	85/85 lb <sub>f</sub>	ASTM D4533
Grab Tensile	850/900 lb <sub>f</sub>	ASTM D751
Strip Tensile	620/620 lb <sub>f</sub> /in	ASTM D751 Procedure B
Adhesion	40 lb <sub>f</sub> /2in	ASTM D751 Dielectric Weld

Bursting Strength	1100 lb <sub>f</sub>	ASTM D751 (Ball Tip)
Low Temperature	-50 °F	ASTM D2136
Weathering Resistance	8000 hrs (min) No appreciable changes, stiffening or cracking of coating	ASTM G155 (Xenon)

Note: <sup>1</sup>Min. Avg. Value, unless otherwise specified.

2.3 MANUFACTURER SOURCE QUALITY CONTROL

- A. The geomembrane manufacturer shall perform source quality control testing to confirm the manufacturer's published material characteristics and demonstrate compliance with this Section. Testing shall be performed at a minimum frequency of once per lot or once every 100,000 square feet, whichever results in the greater number of tests.
- B. The Contractor shall submit the geomembrane manufacturer's source quality certification for all rolls of geomembrane shipped to the site. Each quality control certificate shall include roll identification numbers and results of quality control tests. The quality control certificate shall be signed by a responsible party employed by the manufacturer, such as the production manager. The quality control certificate shall include:
  - 1. Roll numbers and identification, resin lot, and batch numbers.
  - 2. Sampling procedures and results of quality control tests.

2.4 LABELING

- A. Each geomembrane roll shall be marked or tagged with the following information:
  - 1. Manufacturer's name.
  - 2. Product identification.
  - 3. Lot number.
  - 4. Roll dimensions.
  - 5. Roll weight.

**PART 3 - EXECUTION**

3.1 GENERAL

- A. Install geomembranes at the locations, lines, and grades shown on the Drawings. All geomembranes shall be installed in accordance with manufacturer guidelines.

3.2 GEOMEMBRANE SUBGRADE

- A. The subgrade on which the geomembrane is to be installed shall be smooth and free of any rocks, sharp objects, debris, or any other protrusions or deleterious material that may damage the geomembrane.

3.3 DEPLOYMENT

- A. Field Panel Placement:

1. Field panels shall be installed as indicated in the approved layout plan and manufacturers guidelines.
2. Sufficient geomembrane shall be deployed to account for shrinkage and contraction while avoiding wrinkles. Installed geomembrane shall be stress-free with no bridging before it is covered.
3. Place sandbags, or other form of ballast approved by the Engineer, on the geomembrane to prevent uplift from wind.  
No vehicles shall be operated on top of the geomembrane during placement.
4. Placement Conditions: Geomembrane placement shall not proceed at an ambient temperature below 32 degrees F or above 100 degrees F as measured 6 inches above the geomembrane surface unless otherwise authorized by the Engineer. Geomembrane shall not be welded during any precipitation, in the presence of excessive moisture (e.g., fog, dew), in an area of ponded water, or in the presence of excessive winds. Placement methods shall prevent damage to underlying materials.

B. Orientation:

1. In general, seams shall be oriented parallel to the line of maximum slope, i.e., oriented up and down the slope.
2. In corners and odd-shaped geometric locations, the number of seams shall be minimized.
3. Seams shall be aligned to produce the fewest possible number of wrinkles and “fishmouths.” Before wrinkles fold over, attempt to push them out. Wrinkles that cannot be pushed out shall be cut out and the cuts repaired.
4. Panels of geomembrane shall have a finished overlap of a minimum of 3 inches for extrusion welding and 5 inches for fusion welding. Overlap may be greater if so recommended by the geomembrane Manufacturer for the type of seaming equipment used.

### 3.4 FIELD SEAMING

A. Seaming:

1. Seaming shall be performed per the manufactures installation guidelines.

### 3.5 INSPECTION AND REPAIR

1. Examine all welds and non-weld areas of the geomembrane for defects, holes, blisters, undispersed raw materials, and any sign of contamination by foreign matter. The surface of the geomembrane shall be clean at the time of the examination.
2. Repair any portion of the geomembrane exhibiting a flaw, according to manufacturer’s guidelines.

### 3.6 GEOMEMBRANE ACCEPTANCE

A. The Contractor shall retain all ownership and responsibility for the geomembrane until final acceptance of the Project by Engineer.

B. The Engineer will accept the geomembrane installation when:

1. All required documentation from the manufacturer and installer has been received and accepted.
2. The installation is complete.

3. The Contractor has submitted all written warranties, certification documents, and drawings required by this section.

**END OF SECTION**

## SECTION 31 11 00 - CLEARING AND GRUBBING

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes: Removal of all vegetation, surface debris, and other objectionable materials within the clearing limits, stripping of all organic material from the surface down to the underlying soil, and disposal of all material removed as part of the clearing, grubbing and stripping operations.

## 1.2 CONSTRUCTION REQUIREMENTS

- A. Remove and dispose of all vegetation and surface debris as indicated on the Drawings and described in the Contract Documents.
- B. At all times, conduct operations to prevent pollution of air and water in accordance with applicable state and local regulations.

## 1.3 SITE INVESTIGATIONS

- A. Previous work to clear the area shown on Sheet C2.0 has been completed. Contractor is responsible to verify the site conditions and complete any remaining work if necessary.
- B. Carefully examine the site to determine the full extent of the work required conforming to the Drawings and this specification.
- C. Determine the nature and location of the work, conditions, the formation and condition of the existing ground surface, obstacles to be encountered, and the character, equipment and facilities needed prior to and during execution of the work. Any inaccuracies or discrepancies between the Drawings and Specifications shall be brought to the City's and the Engineer's attention in order to clarify the exact nature of the Work to be performed.

## 1.4 SUBMITTALS

- A. Provide a Clearing, Grubbing, and Stripping Plan that shows to proposed method clearing, grubbing, and stripping and location of temporary stockpile location. This may be included in the Construction Plan, as required in SECTION 01 10 00 – DESCRIPTION OF WORK AND BASIS OF PAYMENT.

## PART 2 - PRODUCTS (NOT USED)

## PART 3 - EXECUTION

## 3.1 CLEARING AND GRUBBING

- A. Clearing and grubbing includes the removal of all vegetation, debris and other objectionable materials, including, but not limited to, grass, weed growth, brush, shrubs as indicated on the Drawings and described in the Contract Documents.
- B. Vegetation is to be removed to the ground surface.
- C. Root mats shall remain unless in excavation areas.
- D. Review material to be cleared and grubbed with the Engineer to determine suitability for on-site disposal. Dispose of material as described in paragraph 3.4.
- E. Provide proper drainage control during clearing and grubbing operations.
- F. Holes resulting from the removal of underground structures and roots that extend below the finished grade shall be cleaned and backfilled with suitable materials and compacted in conformance with the requirements of SECTION 31 00 00 - EARTHWORK.

## 3.2 STRIPPING

- A. Stripping shall consist of removing and disposing of all organics, bark, straw, straw bales, sod, grass roots, and other objectionable materials from the surface down to the underlying soil. Strippings shall not be mixed with the underlying soil.
- B. Stripping shall only occur in excavation areas.

## 3.3 PROTECTION

- A. Protect trees, plant growth and features outside designated clearing limits.

## 3.4 DISPOSAL OF MATERIALS

- A. Trees and logs that longer than 8 feet shall be stockpiled at a location on the site specified by the landfill operator.
- B. Stumps, roots, brush, rotten wood, soils and other refuse from the clearing, grubbing and stripping operations acceptable for on-site disposal shall be placed as directed by the Engineer and according to SECTION 31 00 00 - EARTHWORK .
- C. Properly dispose of any objectionable material that is not acceptable for disposal at the Landfill in an off-site disposal facility.

- D. Coordinate all disposal in the Landfill with the operations staff.
- E. Soils removed in association with clearing of site vegetation and stripping shall be collected and stockpiled as shown on the Drawings or as directed by the engineer. Stockpile and handle these soils such that material shall not be transported offsite due to the effect of stormwater or wind action.

END OF SECTION 31 11 00



## SECTION 31 23 00 - EXCAVATION

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. All excavation shall be unclassified excavation, which shall consist of the excavation, haul, and placement in the designated areas as shown on the Drawings of all materials of whatever character encountered in the work. The Contractor shall use whatever methods and equipment are necessary to excavate to the limits designated by the Drawings and Specifications and authorized by the Engineer, except that no equipment or method may be used that, because of its action, deteriorates the subgrade and makes additional excavation necessary beyond the limits originally authorized or shown on the Drawings.
- B. It is the expressed intent of this project to excavate in-situ or existing material, and that no area be over-excavated requiring filling and compaction to meet design final excavation surfaces. Any excavation beyond the authorized lines, grades, and cross sections shall be filled with Berm Fill/Trench Backfill (Refer to SECTION 31 00 00 – EARTHWORK, Article 2.2), and compacted in accordance with SECTION 31 00 00 – EARTHWORK, Article 3.3 without additional cost to the Owner.
- C. It shall be the responsibility of the Contractor, during construction, to keep all embankments and excavation well shaped and drained. Track marks from equipment (i.e., tracked dozer) on final graded slopes, including the Stockpile area shall be parallel with the slope contour lines to minimize hillside erosion.
- D. Prior to the start of any excavation, snow, ice and standing water shall be removed. The Contractor shall perform whatever work is necessary to prevent flow and accumulation of surface water, groundwater, snow, or ice in all excavations. All work associated with snow and ice removal, pumping, or dewatering shall not be paid for directly, but shall be considered as an incidental obligation of the Contractor.
- E. Ownership of Material: All onsite materials shall only be used for the purposes designated in the Drawings and Specifications or placed at locations shown. All material at the landfill site and the stockpiles belongs to the Owner and shall remain property of the Owner during the project and upon project completion.

## 1.2 DEFINITIONS

- A. General Excavation Including Haul and Placement: Excavation shall consist of all soil materials encountered in the excavation areas as shown on the Drawings.
- B. Unauthorized Excavation: Any excavation, or movement of material beyond the indicated excavation limits without written authorization from the Engineer.

### 1.3 SUBMITTALS

- A. Excavation Plan detailing methods and sequencing of excavation.
  - 1. May be included in the Construction Work Plan.
- B. Traffic/Haul Plan addressing interface with landfill operations and other contractors.
  - 1. May be included in the Construction Work Plan.

### 1.4 QUALITY ASSURANCE

- A. Provide adequate survey control to avoid unauthorized over excavation and also to avoid placing excavated material outside the limits of the Stockpile area as shown on the Drawings.

### 1.5 WEATHER LIMITATIONS

- A. Material excavated when frozen or when air temperature is less than 32 degrees F shall not be used as fill or backfill until material completely thaws.
- B. Material excavated during inclement weather shall not be used as fill or backfill until after material drains and dries sufficiently for proper compaction.

### 1.6 SEQUENCING AND SCHEDULING

The Contractor shall perform excavation in a systematic manner matching the grade shown in the Drawings.

## PART 2 - PRODUCTS (NOT USED)

## PART 3 - EXECUTION

### 3.1 GENERAL

- A. The Excavation Plan will be reviewed and approved by the Engineer.
- B. Excavate to lines, grade, and dimensions shown on the Drawings and as necessary to accomplish Work. Excavate to within tolerance of 0.1 foot plus and 0.2 foot minus, except where dimensions or grades are shown or specified as maximum or minimum.
- C. Do not over excavate without written authorization of Engineer.
- D. Remove or protect obstructions as shown on the Drawings and as specified.
- E. Organic material shall be removed from the excavation site and placed at the location shown on the Drawings and in accordance with SECTION 31 00 00 - EARTHWORK.

### 3.2 EMBANKMENT AND CUT SLOPES

- A. Shape, trim, and finish cut slopes to conform with lines, grades, and cross-sections shown, with proper allowance for topsoil or slope protection, where shown.
- B. Remove stones and rock that exceed 6 inches in diameter and that are loose and may roll down slope. Remove exposed roots from cut slopes.

### 3.3 STOCKPILE EXCAVATED MATERIAL

- A. Stockpile excavated material that is suitable for screening as fill or backfill in temporary stockpile areas within the project limits as approved by the Engineer until material is used in the construction. Refer to Specifications SECTION 31 00 00 - EARTHWORK, Part 2.2 for description of material that can be used for fill or backfill.
- B. Confine stockpiles to within approved work areas. Do not obstruct roadways.
- C. Un-used stockpiles shall remain on-site and be stabilized with a vegetative mat per SECTION 32 92 19 – SEEDING.

END OF SECTION 31 23 00

## SECTION 31 23 16 - TRENCHING

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Excavating trenches for sewer line from pre-treatment pond outlet control box to lagoon inlet control box.
2. Excavating trenches for air main lines from outside blower building to air distribution headers for lagoon Cell #1 and Cell #2.
3. Compacted fill from top of utility bedding to finished grade.
4. Backfilling and compaction per SECTION 31 00 00 - EARTHWORK.

## B. Related Sections:

1. SECTION 01 33 00 - SUBMITTAL PROCEDURES: Requirements for submittals.
2. SECTION 31 00 00 - EARTHWORK.
3. SECTION 33 31 00 - SANITARY UTILITY SEWERAGE PIPING: Sanitary sewer piping and bedding.
4. SECTION 46 51 00 - AIR MAIN AND VALVES. Piping and bedding from Blower Building to air manifold connections.

## 1.2 DEFINITIONS

- A. Utility: Any buried pipe, duct, conduit, or cable.

## 1.3 SUBMITTALS

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

## 1.4 QUALITY ASSURANCE

- A. Perform Work in accordance with all Federal, State, and local requirements.

## 1.5 FIELD MEASUREMENTS

- A. Verify field measurements prior to trenching.

## 1.6 COORDINATION

- A. Verify Work associated with lower elevation utilities is complete before placing higher elevation utilities.

## PART 2 - PRODUCTS

## 2.1 FILL MATERIALS

- 1. Per SECTION 31 00 00 – EARTHWORK, Article 2.2.

## PART 3 - EXECUTION

## 3.1 LINES AND GRADES

- A. Lay pipes to lines and grades indicated on Drawings.
  - 1. Engineer reserves right to make changes in lines, grades, and depths of utilities when changes are required for Project conditions.
- B. Use laser-beam instrument with qualified operator to establish lines and grades.

## 3.2 PREPARATION

- A. Identify required lines, levels, contours, and datum locations.
- B. Protect plant life and other features remaining as portion of final landscaping.
- C. Protect bench marks, fences, existing buildings, and existing treatment components from equipment and vehicular traffic.
- D. Maintain and protect above and below grade utilities indicated to remain.

## 3.3 TRENCHING

- A. Excavate subsoil required for utilities.
- B. Remove lumped subsoil, boulders, and rock.
- C. Do not advance open trench more than 200 feet ahead of installed pipe.
- D. Cut trenches sufficiently wide to enable installation and allow inspection. Remove water or materials that interfere with Work.
- E. Excavate bottom of trenches maximum 2 feet wider than outside diameter of pipe.

- F. Stockpile excess soil in Owner designated area to depth not exceeding 8 feet and protect from erosion.

### 3.4 SHEETING AND SHORING

- A. If required, sheet, shore, and brace excavations to prevent danger to persons, structures and adjacent properties and to prevent caving, erosion, and loss of surrounding subsoil.
- B. Design sheeting and shoring to be removed at completion of excavation work.
- C. Repair damage caused by failure of the sheeting, shoring, or bracing and for settlement of filled excavations or adjacent soil.
- D. Repair damage to new and existing Work from settlement, water or earth pressure or other causes resulting from inadequate sheeting, shoring, or bracing.

### 3.5 BACKFILLING

- A. Backfill trenches to contours and elevations with unfrozen fill materials.
- B. Systematically backfill to allow maximum time for natural settlement. Do not backfill over porous, wet, frozen, or spongy subgrade surfaces.
- C. Place fill material in continuous layers and compact per SECTION 31 00 00 – EARTHWORK, Article 3.3.
- D. Do not leave more than 50 feet of trench open at end of working day.
- E. Protect open trench to prevent danger to Owner and the public.

### 3.6 FIELD QUALITY CONTROL

- A. See SECTION 31 00 00 – EARTHWORK.
- B. When tests indicate Work does not meet specified requirements, remove Work, replace, and re-compact.

### 3.7 PROTECTION OF FINISHED WORK

- A. Reshape and re-compact fills subjected to vehicular traffic during construction.

### 3.8 SCHEDULE

- A. Sanitary Piping:
  - 1. Cover sewer pipe and bedding with backfill material per SECTION 31 00 00 – EARTHWORK and the Drawings.

B. Air Main:

1. Cover air main and bedding with backfill material per SECTION 31 00 00 – EARTHWORK and the Drawings.

END OF SECTION 31 23 16

## SECTION 31 23 19 - DEWATERING

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Dewatering open excavations.
  - 2. Dewatering trenches.
  - 3. Water disposal.

## 1.2 SYSTEM DESCRIPTION

- A. Provide dewatering and surface water control systems to permit Work to be completed on dry and stable subgrade.

## 1.3 PERFORMANCE REQUIREMENTS

- A. Design dewatering systems to:
  - 1. Maintain stability of sides and bottoms of excavations and trenches.
- B. Design surface water control systems to:
  - 1. Collect and remove surface water and seepage entering excavation.

## 1.4 SUBMITTALS

- A. Section 01 30 00 – Product Data Submittals: Requirements for submittals.
- B. Dewatering Plan: Detailed plan and operation schedule for dewatering excavations. Include copies of permits and approvals.

## 1.5 QUALITY ASSURANCE

- A. Comply with local, state, and federal regulations for disposal of dewatering effluent from the construction site.
- B. Dewatering effluent shall not be pumped or otherwise diverted into existing storm drains unless required permits are obtained, including from Alaska Department of Environmental Conservation and US Environmental Protection Agency.



## 1.6 SEQUENCING

- A. Section 01 10 00 - Summary: Requirements for sequencing.
- B. Sequence work to obtain required permits before start of dewatering operations.
- C. Sequence work to install surface water control systems minimum 1 day before starting excavation or trenching.

## 1.7 COORDINATION

- A. Coordinate work to permit the following construction operations to be completed on dry stable subgrade.
  - 1. Excavation for structures specified in Section 31 23 00.
  - 2. Trenching for utilities specified in Section 31 23 16.

## PART 2 - PRODUCTS – Not Used

## PART 3 - EXECUTION

### 3.1 DEWATERING EXCAVATIONS

- A. Provide all equipment necessary for dewatering. Provide standby equipment to insure maintenance of dewatering operations in the event of equipment failure.
- B. Commence dewatering when groundwater is first encountered and provide continuous dewatering until work is complete.
- C. Dewatering shall be conducted in a manner to preserve the undisturbed bearing capacity of the subgrade soils at the bottom of excavation.
- D. If foundation soils are disturbed or loosened by upward seepage of water or uncontrolled flow of water, the affected areas shall be excavated and replaced with structural fill.
- E. Maintain the water level below the bottom of excavation where groundwater occurs during excavation, construction, and backfilling. Operate dewatering system continuously until backfill is minimum 2 feet above normal ground water table elevation.
- F. When dewatering system cannot control water within excavation, notify Engineer and stop excavation work.
  - 1. Supplement or modify dewatering system and provide other remedial measures to control water within excavations.

2. Demonstrate dewatering system operation complies with performance requirements before resuming excavation operations.
- G. Modify dewatering and surface water control systems when operation causes or threatens to cause damage to new construction, existing site improvements, adjacent property, or adjacent water wells.
- H. Do not discontinue dewatering operations without Engineer's approval.
- I. Correct unanticipated pressure conditions affecting dewatering system performance.
- J. Dispose of dewatering effluent in a manner to not cause damage to adjacent property.
- K. Remove dewatering and surface water control systems after dewatering operations are discontinued.
- L. Repair damage caused by dewatering and surface water control systems or resulting from failure of systems to protect property.

### 3.2 SURFACE WATER CONTROL SYSTEM

- A. Provide ditches, berms, and other devices to divert and drain surface water from excavation area.
- B. Divert surface water and seepage water within excavation areas into sumps and pump water into drainage channels or storm drains to maintain the bottom free from standing water.
- C. Control and remove unanticipated water seepage into excavation.

END OF SECTION

## SECTION 31 25 14 - STORMWATER POLLUTION PREVENTION PLAN

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Prepare, implement, and maintain Stormwater Pollution Prevention Plan (SWPPP).

## 1.2 REFERENCES

- A. Alaska Department of Transportation & Public Facilities "Storm Water Contractor Guidance for Preparing and Executing Storm Water Pollution Prevention Plans," dated October 1993.
- B. NPDES General Permits for Storm Water Discharges from Construction Activities.
- C. Clean Water Act, 33 U.S.C. 1251 et seq., as amended by the Water Quality Act of 1987, P.L. 100-4.

## 1.3 SUBMITTALS

- A. Section 01 30 00 – Product Data Submittals: Requirements for submittals.
- B. SWPPP: Prepare and submit SWPPP document. The SWPPP shall be:
  1. Signed by Contractor.
  2. Signed by each Subcontractor participating in any project work activity.
  3. Signed by Contractor and each Subcontractor prior to any services being rendered.
  4. Kept on project site at all times.
  5. Deliver copy to Alaska Department of Environmental Conservation (ADEC).
- C. Notice-of-Intent (NOI): Prepare and submit a NOI for stormwater discharges associated with construction activity.
  1. Deliver to US Environmental Protection Agency (EPA).
  2. Deliver copy to ADEC.
- D. Hazardous Material Control Plan (HMCP): Prepare and submit a HMCP for prevention of pollution associated with construction activity.
  1. Submit 2 signed copies of the HMCP to the Engineer for approval.
  2. Submit copies no less than 12 days before construction begins.
  3. Submittals will be reviewed by the Engineer within 12 days.

#### 1.4 CLOSEOUT SUBMITTALS

- A. Notice-of-Termination (NOT): Prepare and submit NOT to EPA upon final stabilization of construction site.
- B. Original SWPPP with all amendments and reports: Submit to Owner upon completion of project.
  - 1. Owner will retain original SWPPP with all amendments and reports for 3 years from date of final stabilization of construction site.

#### PART 2 - PRODUCTS - Not Used

#### PART 3 - EXECUTION

##### 3.1 GENERAL

- A. Contractor shall be responsible for:
  - 1. Maintaining and amending SWPPP to keep it current.
  - 2. Updating SWPPP to include changes in design.
  - 3. Providing current listing of all Subcontractors who will implement a storm water mitigation measure required by SWPPP.
  - 4. Providing current listing of construction activities which will require a mitigation measure of SWPPP.
  - 5. Conducting inspections in accordance with SWPPP.
  - 6. Writing inspection reports and appending the reports to the pollution prevention systems outlined in SWPPP.
- B. Comply with requirements of NPDES General Permits for Stormwater Discharges from Construction Activities classified as “Associated with Industrial Activity.”
- C. Comply with all local and state regulatory requirements for collection, control, and discharge of storm water.
- D. Incorporate into SWPPP all project updates and revisions which affect the SWPPP. Append Plan Updates/Revisions to SWPPP.
- E. Prepare and update SWPPP Record of Revision to document any change to SWPPP, Inspection Report, Project Update or Revision, and construction activities of Contractor or Subcontractors.

### 3.2 PRE-CONSTRUCTION ACTIVITIES

- A. Complete a description of the nature and intended sequence of construction activities which disturb soils for major portions of site. Description shall include:
  - 1. Type of activity.
  - 2. Estimated dates of activity (both start and finish).
  - 3. Name of Contractor or Subcontractor who will accomplish the activity.
- B. Attach written description of construction activities and any amendments to SWPPP.

### 3.3 CONSTRUCTION ACTIVITIES

- A. Provide list of Contractors and Subcontractors participating in each construction activity.
  - 1. List shall be kept current throughout duration of project.
  - 2. Each Contractor or Subcontractor shall sign Signature Page of SWPPP document prior to commencement of services.
- B. Contractor shall list current activities and names of Contractors or Subcontractors who complete each construction activity.
- C. During construction, the official updated SWPPP shall be kept at the construction site.

### 3.4 MAINTENANCE AND INSPECTION

- A. Controls identified in SWPPP for project site shall be inspected periodically and maintenance started as soon as a deficiency is observed.
- B. Contractor shall provide qualified person to inspect:
  - 1. Disturbed areas of construction site that have not been stabilized.
  - 2. Areas used for storage of materials exposed to precipitation.
  - 3. Structural control measures.
  - 4. Locations where vehicles enter or exit project site.
- C. Disturbed areas and areas used for storage of equipment and materials exposed to precipitation shall be inspected for evidence of and potential for pollutants entering the storm drainage system.
- D. Control measures identified in SWPPP shall be observed to ensure they are effective in preventing impacts to receiving waters.
- E. Inspection report shall be written summarizing:
  - 1. Scope of inspection.
  - 2. Name(s) and qualifications of personnel making inspection.
  - 3. Date of inspection.

4. Major observations relating to implementation of SWPPP, and actions and modifications taken to correct insufficiencies identified during inspection.
5. Identification of any incident of non-compliance. If no incidents of non-compliance are observed, report shall contain a certification that facility is in compliance with SWPPP and general NPDES permit.
6. Inspection report shall be signed by project superintendent or duly authorized representative.
7. Any signatory of a document for the SWPPP shall include this certification: *“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system design to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.”*
8. All inspection reports shall be made and retained as part of original SWPPP.
9. Each inspection report shall be appended to original SWPPP.

### 3.5 Hazardous Material Control Plan Requirements

- A. Prepare a HMCP for prevention of pollution that stems from the storage, use, containment, cleanup, and disposal of hazardous material, including oil products related to construction activities and equipment. (See 40 CFR 117 and 302 for listing of hazardous materials.) Collate Material Safety Data Sheets in one location and reference location in HMCP.
  1. List the types and quantities of equipment and cleanup materials available on site. Include a list and location map of cleanup materials, at each different work site and readily available off site (main site, material site, batch plant, storage yard, explosives dump, equipment or fueling yard, etc.).
  2. Specify the line of authority and designate a field representative for spill response, and one representative for each subcontractor.
  3. List and give the location of hazardous materials, including office materials, to be used or stored on site, and estimated quantities.
  4. Store hazardous materials in covered storage areas.
  5. Detail methods of disposing of waste petroleum products and other hazardous materials generated by the project.
  6. Identify the locations where storage, fueling and maintenance activities will take place, describe the maintenance activities, and list controls to prevent accidental spillage of oil, petroleum products and other hazardous materials.
  7. Detail procedures for containment and cleanup of hazardous substances. Detail a plan for the prevention, containment, cleanup, and disposal of soil and water contaminated by accidental spills. Detail a plan for dealing with unexpected contaminated soil and water encountered during construction.

END OF SECTION

## SECTION 32 31 13 - FENCING

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Chain-Link Fence
  - 2. Swing Gate

## 1.2 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

## 1.3 REFERENCES

- A. ASTM:
  - 1. ASTM F567 - Standard Practice for Installation of Chain-Link Fence.
  - 2. ASTM F626 - Standard Specification for Fence Fittings.
  - 3. ASTM F900 - Standard Specification for Industrial and Commercial Swing Gates.
  - 4. ASTM F1043 - Standard Specification for Strength and Protective Coatings on Metal Industrial Chain Link Fence Framework.
  - 5. ASTM F1083 - Standard Specification for Pipe, Steel, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures.
- B. Chain Link Fence Manufacturers Institute:
  - 1. CLFMI - Product Manual.

## 1.4 SUBMITTALS

- A. Product Data: For each type of product indicated. Include construction details, material descriptions, dimensions of individual components and profiles, and finishes for chain-link fences and gates.
  - 1. Fence and gate posts, rails, and fittings.
  - 2. Chain-link fabric, reinforcements, and attachments.
  - 3. Gates and hardware.
- B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work. Show accessories, hardware, gate operation, and operational clearances.
- C. Warranty for work.

### 1.5 WARRANTY

- A. Fence installer shall warranty the installed fence system for a period of (5) years from date of Owner's beneficial occupancy.

### 1.6 PROJECT CONDITIONS

- A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

## PART 2 - PRODUCTS

### 2.1 CHAIN LINK FENCE FABRIC

- A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist. Comply with CLFMI Product Manual and with requirements indicated below:
  - 1. Fabric Height: As indicated on Drawings.
  - 2. Steel Wire Fabric: Wire with a diameter of 0.148 inch.
    - a. Mesh Size: 2-1/8 inches.
  - 3. Metallic Coating:
    - a. Type A, consisting of not less than minimum 2.0-oz./sq. ft. average zinc coating per ASTM A 123/A 123M or 4.0-oz./sq. ft. zinc coating per ASTM A 653/A 653M.
  - 4. Selvage: Knuckled at both selvages.

### 2.2 FENCE FRAMING

- A. Posts and Rails: Comply with ASTM F 1043 for framing, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 based on the following:
  - 1. Fence Height: As indicated on Drawings.
  - 2. Horizontal Framework Members: Rails complying with ASTM F 1043.
  - 3. Brace Rails: Comply with ASTM F 1043.
  - 4. Metallic Coating for Steel Framing:
    - a. Type A, consisting of not less than minimum 2.0-oz./sq. ft. average zinc coating per ASTM A 123/A 123M or 4.0-oz./sq. ft. zinc coating per ASTM A 653/A 653M.
  - 5. Heavy Industrial Strength: Material Group IA, round steel pipe, Schedule 40.

### 2.3 TENSION WIRE

- A. Steel Wire: 0.177-inch diameter, tension wire complying with ASTM F 1664, zinc-coated steel wire.



## 2.4 SWING GATES

- A. General: Comply with ASTM F 900 for gate posts and swing gate types
  - 1. Gate Leaf Width: As indicated on Drawings.
  - 2. Gate Fabric Height: As indicated on Drawings.
- B. Pipe and Tubing:
  - 1. Zinc-Coated Steel: Comply with ASTM F 1043 and ASTM F 1083; protective coating and finish to match fence framing.
  - 2. Gate Posts: Round tubular steel.
  - 3. Gate Frames and Bracing: Round tubular steel.
- C. Frame Corner Construction: Welded.
- D. Hardware:
  - 1. Hinges: 180-degree inward swing.
  - 2. Latches permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.

## 2.5 FITTINGS

- A. General: Comply with ASTM F 626.
- B. Post Caps: Provide for each post.
  - 1. Provide line post caps with loop to receive tension wire or top rail.
- C. Rail and Brace Ends: For each gate, corner, pull, and end post.
- D. Rail Fittings: Provide the following:
  - 1. Top Rail Sleeves: Pressed-steel or round-steel tubing not less than 6 inches long.
  - 2. Rail Clamps: Line and corner boulevard clamps for connecting rails in the fence line-to-line posts.
- E. Tension and Brace Bands: Pressed steel.  
  
Tension Bars: Steel, length not less than 2 inches shorter than full height of chain-link fabric. Provide one bar for each gate and end post, and two for each corner and pull post, unless fabric is integrally woven into post.
- F. Truss Rod Assemblies: Steel, hot-dip galvanized after threading rod and turnbuckle or other means of adjustment.
- G. Tie Wires, Clips, and Fasteners: According to ASTM F 626.
  - 1. Standard Round Wire Ties: For attaching chain-link fabric to posts, rails, and frames, complying with the following:
    - a. Hot-Dip Galvanized Steel: 0.148-inch diameter wire; galvanized coating thickness matching coating thickness of chain-link fence fabric.
- H. Finish:
  - 1. Metallic Coating for Pressed Steel or Cast Iron: Not less than 1.2 oz. /sq. ft. zinc.

## PART 3 - EXECUTION

## 3.1 EXAMINATION

- A. Examine areas and conditions, with Installer present, for compliance with requirements for earthwork, siding, and other conditions affecting performance of the Work.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

## 3.2 PREPARATION

- A. Stake locations of fence lines, gates, and terminal posts. Indicate locations of utilities, underground structures, benchmarks, and property monuments.

## 3.3 INSTALLATION, GENERAL

- A. Install chain-link fencing to comply with ASTM F 567 and more stringent requirements indicated.

## 3.4 CHAIN-LINK FENCE INSTALLATION

- A. Post Setting: Set posts by mechanically driving into soil at indicated spacing into firm, undisturbed soil.
  - 1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
  - 2. Mechanically Driven Posts: Drive into soil to depth equal to height of fence. Protect post top to prevent distortion.
- B. Terminal Posts: Locate terminal end, corner, and gate posts per ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment of 15 degrees or more.
- C. Line Posts: Space line posts uniformly at 10 feet O.C. or as shown on drawings.
- D. Post Bracing and Intermediate Rails: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.
  - 1. Locate horizontal braces at midheight of fabric 72 inches or higher, on fences with top rail and at two-third fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.
- E. Tension Wire: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Pull wire taut, without sags. Fasten fabric to tension wire with 0.120-inch-diameter hog rings of same material and finish as fabric wire, spaced a maximum of 24 inches O.C. Install tension wire in locations indicated before stretching fabric. Provide horizontal tension wire at the following locations:

1. Extended along top and bottom of fence fabric. Install top tension wire through post cap loops. Install bottom tension wire within 6 inches of bottom of fabric and tie to each post with not less than same diameter and type of wire.
- F. Top Rail: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer
- G. Intermediate and Bottom Rails: Install and secure to posts with fittings.
- H. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Pull fabric taut and tie to posts, rails, and tension wires. Anchor to framework so fabric remains under tension after pulling force is released.
- I. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts with tension bands spaced not more than 15 inches O.C.
- J. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric per ASTM F 626. Bend ends of wire to minimize hazard to individuals and clothing.
  1. Maximum Spacing: Tie fabric to line posts at 12 inches O.C. and to braces at 24 inches O.C.
- K. Fasteners: Install nuts for tension bands and carriage bolts on the side of the fence opposite the fabric side.

### 3.5 GATE INSTALLATION

- A. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

### 3.6 GROUNDING AND BONDING

- A. Bonding Method for Gates: Connect bonding jumper between gate post and gate frame.
- B. Connections: Make connections to minimize possibility of galvanic action or electrolysis. Select connectors, connection hardware, conductors, and connection methods so metals in direct contact will be galvanically compatible.
  1. Use electroplated or hot-tin-coated materials to ensure high conductivity and to make contact points closer in order of galvanic series.
  2. Make connections with clean, bare metal at points of contact.
  3. Make aluminum-to-steel connections with stainless-steel separators and mechanical clamps.
  4. Make aluminum-to-galvanized-steel connections with tin-plated copper jumpers and mechanical clamps.

- 5. Coat and seal connections having dissimilar metals with inert material to prevent future penetration of moisture to contact surfaces.
- C. Bonding to Lightning Protection System: If fence terminates at lightning-protected building or structure, ground the fence and bond the fence grounding conductor to lightning protection down conductor or lightning protection grounding conductor complying with NFPA 780.

3.7 ADJUSTING

- A. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

END OF SECTION 32 31 13

## SECTION 32 92 19 - SEEDING

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section includes furnish and establish a perennial stand of grass or other specified living vegetative cover by placing seeding on all fill slopes at locations where Establish Turf is shown on the Drawings. Maintain the cover for the term of the Contract.

## PART 2 - PRODUCTS

## 2.1 IMPORTED MATERIALS

- A. Seed: furnish seed conforming to the following:
- 60% Bering Hairgrass
  - 35% Red Fescue (Arctared)
  - 5% Annual Ryegrass
- B. Fertilizer: furnish a standard commercial fertilizer that contains a mixture of chemical ingredients in the ratio of (20-20-10) 20% Nitrogen, 20% Phosphorus, 10% Potassium (potash).
- C. Mulch: Use one of the following:
1. Wood Cellulose Fiber or Natural Wood Fiber. Processed wood fiber with the following characteristics:
    - a. Contains no germination- or growth-inhibiting factors.
    - b. Will remain in uniform suspension in water under agitation and will blend with grass seed, fertilizer and other additives to form a homogeneous slurry.
    - c. Will form a blotter-like ground cover on application, having moisture absorption and percolation properties and the ability to cover and hold grass seed in contact with soil.
    - d. Dyed a suitable color to facilitate inspection of its placement.
  2. Ship the mulch material in packages of uniform weight (plus or minus 5%) and bearing the name of the manufacturer and the air-dry weight content.
  3. Use a commercial tackifier on all slopes steeper than 2:1. Use the amount recommended by the manufacturer.
  4. Dried Peat Moss. Partially decomposed fibrous or cellular stems and leaves of any of several species of Sphagnum mosses with the following characteristics:
    - a. Chopped or shredded to allow distribution through normal hydraulic type seeding equipment and capable of being suspended in water to form part of a homogeneous slurry.
    - b. Free from woody substances and mineral matter such as sulfur or iron and with a pH value of between 4.0 and 6.5.

- c. Furnished in an air dry condition and contain less than 35% moisture by weight. Have a water holding capacity of not less than 800% by weight on an oven dry basis.
- d. Non-toxic.

### PART 3 - EXECUTION

#### 3.1 CONSTRUCTION REQUIREMENTS

- A. Clear all areas to be seeded of stones 4 inches in diameter and larger. Make areas to be seeded reasonably free of ruts, holes, and humps. Roughen the surface slightly by means of dozer-tracking or other approved method.
- B. Do not seed during windy conditions or when climatic conditions or ground conditions would hinder placement or proper growth. Seeding shall be accomplished the following growing season.
- C. APPLICATION: Apply seed mix at the following rates:
  - 1. Apply fertilizer at the rate of 335 pounds per acre.
  - 2. Apply seed at the rate of 45 pounds per acre.
  - 3. Apply mulch at the rate of 3,500 pounds per acre, if applicable.

Use any of the following methods:

- 4. Hydraulic Method.
  - a. Furnish and place slurry made of seed, fertilizer, water, and mulch.
  - b. Use hydraulic seeding equipment that will maintain a continuous agitation and apply a homogeneous mixture through a spray nozzle. The pump must produce enough pressure to maintain a continuous, nonfluctuating spray that will reach the extremities of the seeding area with the pump unit located on the fill pad or roadbed. Provide enough hose to reach areas not practical to seed from the nozzle unit situated on the fill pad or roadbed.
  - c. Mulch material shall be added to the water slurry in the hydraulic seeder after adding the proportionate amounts of seed and fertilizer. Add seed to the slurry mixture no more than 30 minutes before application.
  - d. Mix the slurry and apply it evenly.
- 5. Dry Methods.
  - a. Use mechanical spreaders, seed drills, landscape seeders, cultipacker seeders, fertilizer spreaders, or other approved mechanical spreading equipment when seed and fertilizer are to be applied in dry form.
  - b. Spread fertilizer separately at the specified rate.
- D. PLANT ESTABLISHMENT AND MAINTENANCE: Protect seeded and revegetated areas against traffic and erosion. Promptly repair surfaces that are gullied or otherwise damaged following seeding by regrading, reseeding, and remulching as needed. Water and maintain seeded areas in a satisfactory condition until final inspection and acceptance of the work. Use equipment that can water all seeded areas without damaging the seed bed. Reseed any areas not showing evidence of satisfactory growth within 3 weeks of seeding.

- E. ACCEPTANCE: The Engineer will perform a visual inspection of seeding to determine final stabilization. During the visual inspection each side of the berms and excavation will be considered a separate area. The Engineer will accept seeding that has become a vegetative matt with 70% cover density in the inspection area.

END OF SECTION 32 92 19

## SECTION 33 05 63 - CONCRETE VAULTS AND CHAMBERS

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. Precast concrete vaults and chambers.
2. Frames and Covers.

## B. Related Requirements:

1. SECTION 01 30 00 – PRODUCT DATA SUBMITTALS: Requirements for submittals.
2. SECTION 31 00 00 - EARTHWORK.
3. SECTION 33 31 00 - SANITARY SEWER: Piping connections to vaults or chambers.

## 1.2 REFERENCE STANDARDS

## A. ASTM International:

1. ASTM C891 - Standard Practice for Installation of Underground Precast Concrete Utility Structures.
2. ASTM C478 - Standard specification for Precast Reinforced Concrete Manhole Sections.
3. ASTM 497 - Standard test methods for Concrete Pipe, Concrete Box Sections, Manhole Sections, or Tile.
4. ASTM C923 - Standard Specification for Resilient Connectors between Reinforced Concrete Manhole Structures, Pipes, and Laterals.
5. ASTM C990 - Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants.
6. ASTM C1244 - Standard Test Method for Concrete Sewer Manholes by the Negative Air Pressure (Vacuum) Test Prior to Backfill.
7. ASTM C1315 - Standard Specification for Liquid Membrane-Forming Compounds Having Special Properties for Curing and Sealing Concrete.

## 1.3 SUBMITTALS

## A. Product Data: Submit manufacturer information regarding component construction, features, configuration, and dimensions.

## B. Shop Drawings:

1. Indicate vault or chamber sizes, locations, elevations, sections, details, frames and covers, piping sizes and elevations of penetrations.

## C. Field Quality-Control Submittals: Indicate results of Contractor-furnished tests and inspections.



## 1.4 QUALITY ASSURANCE

- A. Obtain precast concrete vaults and chambers from single source.
- B. Perform Work according to NPCA Quality Control Manual for Precast and Prestressed Concrete Plants.

## 1.5 QUALIFICATIONS

- A. Manufacturer: Company specializing in manufacturing products specified in this Section with minimum three years' experience.

## 1.6 DELIVERY, STORAGE, AND HANDLING

- A. Concrete Products: Do not deliver products until concrete has cured five days or has attained minimum 75 percent of specified 28-day compressive strength.
- B. Inspection: Accept materials on Site in manufacturer's original packaging and inspect for damage.
- C. Handling:
  - 1. Comply with manufacturer instructions for unloading, storing, and moving vaults or chambers.
  - 2. Lift vaults or chambers from designated lifting points.
- D. Storage:
  - 1. Store materials according to manufacturer instructions.
  - 2. Store vaults and chambers to prevent damage to Owner's property or other public or private property.
  - 3. Repair property damaged from materials storage.
- E. Protection:
  - 1. Protect materials in clean location remote from construction operations areas.
  - 2. Provide additional protection according to manufacturer instructions.

## PART 2 - PRODUCTS

## 2.1 PERFORMANCE AND DESIGN CRITERIA

- A. Minimum Loading: Walkway Traffic:
  - 1. Comply with ASTM C857; ASTM 478.
  - 2. Maximum Loading: 300 psf.

## 2.2 PRECAST CONCRETE VAULTS AND CHAMBERS

### A. Fabricator List:

1. Anchorage Precast Concrete
2. D&S Concrete

## 2.3 FRAMES AND COVERS

### A. Description:

1. Materials of Construction:
  - a. As indicated on Drawings.
2. Lid:
  - a. Size: As indicated on Drawings.
  - b. Surface: As indicated on Drawings.
  - c. Type: As indicated on Drawings.
  - d. Security: Lockable.

### B. Joint Sealants and Joint Gaskets:

1. Gasket Joints for Circular Concrete Pipe:
  - a. Comply with ASTM C443.
  - b. Gaskets: Standard.

### C. Pipe Entry Connectors: Comply with ASTM C923.

### D. Grout:

1. Cement Type: Portland cement, sand, and water mixture with stiff consistency to suit intended purpose.
2. Nonshrink Type:
  - a. Description: Premixed compound consisting of nonmetallic aggregate, cement, and water-reducing and plasticizing agents.
  - b. Comply with ASTM C1107/C1107M.
  - c. Minimum Compressive Strength: 2,400 psi in 48 hours, and 7,000 psi in 28 days.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify that items provided by other Sections of Work are properly sized and located.
- B. Verify correct size and elevation of excavation.

- C. Verify that subgrade is properly prepared, and ready to receive Work of this Section.

### 3.2 PREPARATION

- A. Mark each vault or chamber by indentation or using waterproof paint showing date of manufacture, manufacturer, and identifying symbols and numbers shown on Drawings to indicate its intended use.
- B. Coordinate placement of inlet and outlet pipe or duct sleeves required by other Sections.
- C. Do not install vault or chamber if Site conditions induce loads exceeding weight capacity of vault or chamber.
- D. Inspect vaults and chambers immediately prior to placement in excavation to verify that they are internally clean and free from damage; remove and replace damaged units.

### 3.3 INSTALLATION

- A. According to ASTM C891.
- B. Conduct operations not to interfere with, interrupt, damage, destroy, or endanger integrity of surface structures or utilities in immediate or adjacent areas.
- C. While lowering vaults or chambers into excavations and joining pipe to units, take precautions to ensure that interiors of pipeline and structure remain clean.
- D. Install vaults and chambers to elevation and alignment as indicated on Drawings.
- E. Base and Alignment:
  - 1. Place foundation slab and trowel top surface level.
  - 2. Grout base of shaft to achieve slope to drain, trowel smooth, and contoured.
  - 3. Place sections plumb and level, trim to correct elevations, and anchor to foundation slab.
- F. Assembly of Multisection Structures:
  - 1. Lower each section into excavation.
  - 2. Clean joint surfaces.
  - 3. Install watertight joint seals according to manufacturer instructions using gasket joints.
- G. Knock-out Boxes:
  - 1. Remove knock outs or cut structure to receive piping without creating openings larger than required to fit pipe.
  - 2. Fill annular space with grout.
- H. Connections:
  - 1. Connect pipe to structure and seal watertight.

2. Cut pipe flush with interior of structure.
  
- I. Backfill excavations for vaults and chambers as specified in SECTION 31 00 00 - EARTHWORK.

END OF SECTION 33 05 63

## SECTION 33 31 00 - SANITARY SEWER

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. Section Includes:
  - 1. Sanitary sewage pipe.
  - 2. Non-pressure couplings.
  - 3. Cleanouts.
- B. Related Sections:
  - 1. Drawings and general provisions of the Contract apply to this Section.
  - 2. SECTION 31 00 00 - EARTHWORK.
  - 3. SECTION 31 23 16 - TRENCHING

## 1.2 REFERENCES

- A. ASTM D2321 - Standard Practice for Underground Installation of Thermoplastic Pipe for Sewers and Other Gravity-Flow Applications.
- B. ASTM F477 - Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
- C. ASTM D3350 - Specification for Polyethylene Plastic Pipe and Fittings Materials.
- D. ASTM F714 - Polyethylene (PE) plastic pipe (SDR-PR) – based on outside diameter.
- E. ASTM F2164 – Standard Practice for Field Leak Testing of Polyethylene (PE) Systems Using Hydrostatic Pressure

## 1.3 DEFINITIONS

- A. Bedding: Fill placed under, beside and directly over pipe, prior to subsequent backfill operations.
- B. HDPE: High Density Polyethylene

## 1.4 SUBMITTALS

- A. Product Data for the following:
  - 1. Piping materials
- B. Field quality-control reports.

### 1.5 DELIVERY, STORAGE, AND HANDLING

- A. Do not store plastic pipe and fittings in direct sunlight.
- B. Protect pipe, pipe fittings, pipe couplings and seals from dirt and damage.
- C. Handle manholes according to manufacturer's written rigging instructions.

## PART 2 - PRODUCTS

### 2.1 SEWER PIPE

- A. All pipe shall be made of high-density polyethylene (HDPE) that conforms to all applicable provisions and requirements of the latest revision of AWWA C901 and AWWA C906 and, by inclusion, all appropriate standards referenced therein
- B. The HDPE compounds utilized in the manufacture of products furnished under this specification shall be listed in PPI TR-4 and are stress rated for pressure pipe with PPI HDS ratings for water at 73°F and PPI HDB ratings at 73°F and 140°F. Plastics PE4710 exceeds PPI TR-3 and ASTM D3350 SCG resistance requirements per ASTM F 1473 (PENT). Plastics PE4710 ductility is substantiated with greater than 438,300 hours (50 years) at 73°F before the onset of SCG. All PE4710 pipe shall be manufactured from a bimodal resin.
- C. All HDPE pipe and fittings shall conform to standard iron pipe size (IPS) outside dimensions (IPS), have a wall thickness meeting SDR 17, and have a minimum pressure rating of 100 psi according to ASTM D2837 at 73 °F with a service rating of 0.5. All HDPE pipe spool sections shall be produced from straight sticks of pipe. Under no circumstances shall any coiled HDPE pipe be furnished under this specification. All sewer pipe shall be black, stamped with the appropriate SDR and ASTM designations.
- D. All HDPE pipe and fittings shall be homogeneous throughout, free of visible cracks, holes, foreign inclusions, blisters, dents, or other injurious defects, and shall be made of materials having the same chemical and physical characteristics. All HDPE pipe ends shall be free from chips, gouges, and other damage. All HDPE pipe and fittings shall be designed for direct pipe-to-pipe or pipe-to-fitting thermal butt fusion or electrofusion jointing.
- E. All core HDPE fittings shall be manufactured to be as strong as or stronger than the pipe the fittings will be joined to, and shall maintain identical IPS outside dimension on stub-outs, and shall conform to the minimum pressure rating listed in section 2.1C. All wyes shall be constructed using a prefabricated reinforced fitting constructed with thickened sidewalls and an inside diameter that matches SDR17 pipe.

### 2.2 GASKETED GRAVITY SEWER JOINTS

- A. Gravity sewer piping shall be connected with rubber gasketed, PVC couplings as shown on the Drawings, HARCO or approved equal.

- B. Gasketed couplings shall be pressure tested with air during fabrication in accordance with this Specification, FIELD QUALITY CONTROL to ensure the gasketed coupling has been assembled properly and the gaskets form a tight seal against the HDPE piping.

### 2.3 CLEANOUTS

1. Cleanout Lid and Top Section Manufacturers:
2. Olympic Foundry Type C or approved equal.
3. Lid shall read, "Sewer."

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. Verify excavation base is ready to receive work and excavations, dimensions, and elevations are as indicated on drawings.

### 3.2 PREPARATION

- A. Correct over excavation with backfill material per SECTION 31 00 00 - EARTHWORK.
- B. Remove large stones or other hard matter which could damage pipe or impede consistent backfilling or compaction.

### 3.3 EARTHWORK

1. Excavating, trenching, and backfilling are specified in SECTION 31 00 00 - EARTHWORK.

### 3.4 PIPING INSTALLATION

- A. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground sanitary sewer piping. Location and arrangement of piping layout take into account design considerations. Install piping as indicated, to extent practical. Where specific installation is not indicated, follow piping manufacturer's written instructions.
- B. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions for using lubricants, cements, and other installation requirements.
- C. Install manholes for changes in direction unless fittings are indicated. Use fittings for branch connections unless direct tap into existing sewer is indicated.
- D. Install proper size increasers, reducers, and couplings where different sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.
- E. Install gravity-flow, nonpressure, drainage piping according to the following:

1. Install piping pitched down in direction of flow, at slopes indicated.
- F. Clear interior of piping and manholes of dirt and superfluous material as work progresses. Maintain swab or drag in piping, and pull past each joint as it is completed. Place plug in end of incomplete piping at end of day and when work stops.

### 3.5 PIPE JOINT CONSTRUCTION

- A. Gasketed Joints:
1. Joining gravity sewer and/or storm drain pipe with gasketed couplings:
    - a. Place piping with spigot end toward direction of flow.
    - b. Firmly seat spigot end in coupling to ensure watertight connection has been made.

### 3.6 INSTALLATION – CLEANOUTS

- A. Install fittings as shown on the Drawings.
- B. Install vertical soil pipe plumb.
- C. On sanitary sewer service runs longer than 150 feet, provide an additional cleanout at the midpoint of the run.
- D. Mount lid and top section flush with the ground surface, unless shown otherwise.

### 3.7 IDENTIFICATION

- A. Materials and their installation are specified in Division 2 Section "Earthwork." Arrange for installation of green warning tapes directly over piping and at outside edges of underground manholes.
1. Use detectable warning tape over nonferrous piping and over edges of underground manhole top section.

### 3.8 FIELD QUALITY CONTROL

- A. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.
- B. Except as provided below, the Contractor shall clean and flush all sanitary sewer lines.
1. Test new piping systems, for leaks and defects.
    - a. Do not enclose, cover, or put into service before inspection and approval.
    - b. Schedule tests and inspections by the Engineer with at least 48 hours advance notice.
    - c. Hydrostatic Testing:
      - 1) Hydrostatic pressure testing shall be in accordance with ASTM F2164 and these specifications. Gauges used in this test shall be properly



certified for accuracy. Hydrostatic pressure testing shall be completed prior to operating the system.

- 2) The Contractor shall use a leakage test as specified herein. All air shall be expelled from the pipe prior to beginning the test. All joints, valves, plugs, caps, etc. shall be tested. Only static pressure will be allowed on the opposite side of the end valves of the section being tested.
- 3) The portion of the pipeline to be tested shall be slowly filled with water and allowed to stand under pressure a sufficient length of time to allow the lining of the pipe to adsorb water, allow the escape of air, and allow for pipe expansion. Polyethylene pipe typically takes 2 to 3 hours for pipe expansion to occur.
- 4) The allowable (maximum) leakage in gallons per hour shall be determined by the formula:  

$$L = [(ND)P] / 7400$$

L = Allowable leakage in gallons per hour  
 N = Summation of mechanical and push on joints in the length of pipe tested  
 D = Nominal diameter of pipe in inches  
 P = Average test pressure during the leakage test in pounds per square inch gauge
- 5) For polyethylene pipe, in addition to an allowance for leakage, an additional allowance is also permitted for expansion. The amount of this allowance can be determined from the following table:

NOMINAL PIPE SIZE (INCHES)	EXPANSION ALLOWANCE (GALLONS/HOUR/100 FEET PIPE)
2	0.08
3	0.10
6	0.30
8	0.50

**\* TEST DURATION**

- 6) If the section to be tested is comprised of several sizes of pipe, calculate the allowable loss rate due to leakage and expansion (HDPE only) for each size and add them together to determine the overall allowable loss rate. Each coupling is considered a single joint, even if it is a twin gasketed coupling. Threaded fittings count as one joint. Polyethylene pipe that is butt fused does not count as a joint.
- d. Replace leaking piping using new materials, and repeat testing until leakage is within allowances.
- e. Replace defective piping using new materials, and repeat inspections until defects are within allowances specified.
- f. Reinspect and repeat procedure until results are satisfactory.

**C. Placing System in Operation**

1. Upon completion of the work and before its final acceptance, the entire system shall be placed into operation under normal pressure and operated at that pressure for a period of not less than 10 days by the Contractor.
2. Any leaks or defects in the construction of the system which develop during the 10-day period shall be repaired and the test continued until the system is accepted by the Engineer.

3.9 CLEANING

- A. Clean dirt and superfluous material from interior of piping. Flush with potable water.

3.10 FINAL CLOSE OUT AND WARRANTY

- A. Upon completion of the improvements, the Contractor shall verify the proper alignment and installation in accordance with the plans. The Contractor shall warranty the proper alignment and installation of the appurtenances for the period of one (1) year after the substantial completion inspection

END OF SECTION 33 30 00

## SECTION 46 07 53 - LAGOON AERATION EQUIPMENT

## PART 1 - GENERAL

## 1.1 SUMMARY

## A. Section Includes:

1. In-water aeration process equipment and piping:
  - a. Fine bubble aeration diffusers, diffuser ballast and all required hardware.
  - b. Floating lateral air distribution / diffuser support system, anchor posts, cable, and hardware.
2. Impermeable floating baffle curtain system.

## B. RELATED WORK

1. SECTION 31 00 00 - EARTHWORK.
2. SECTION 31 23 16 - TRENCHING.
3. SECTION 46 51 00 - AIR MAIN AND VALVES.

## 1.2 DESCRIPTION OF WORK

- A. The Wastewater Treatment System Package consists of multiple processes as designed and supplied by Nexom, Inc., or approved equivalent. Any approved equivalent must include required State of Alaska regulatory approvals at bid time, at no additional cost to the Owner.
- B. All equipment specified in this specification shall be supplied as a complete package, from one supplier (unless specifically noted otherwise in the specifications), in order to unify responsibility for the system warranty, performance, and proper operation.

## 1.3 BASIS OF DESIGN

- A. The design drawings, system layout, equipment selection, etc. have been based on the OPTAER aeration system. This system was selected by the Engineer (Contract Administrator) to best meet the design requirements for this application. The total system includes aeration diffusers, floating laterals, impermeable baffles, anchoring system and all associated appurtenances.
- B. The OPTAER system is the basis of design and shall be manufactured and supplied by:  
Nexom, Inc.  
Phone: (888) 426-8180  
Email: [info@nexom.com](mailto:info@nexom.com)
- C. Components specified herein shall be supplied by one supplier and shall be of the manufacturer's latest design.

- D. Under no circumstances will a system consisting of parts compiled and assembled by a manufacturer's representative or distributor be accepted.
- E. General Contractor shall name at time of bid all major subcontractors and suppliers to be used. Use of any subcontractors or suppliers other than named in bid form will not be accepted.
- F. This specification shall be the standard by which any alternative system submittal will be reviewed. The decision of the Contract Administrator with respect to approval or rejection of any alternate equipment proposed is final (refer to *Approval of Alternates* section)

#### 1.4 GENERAL LAYOUT / ARRANGEMENT

- A. The Lagoon aeration system shall generally consist of shallow buried main air supply headers with floating distribution laterals:
  - 1. The existing metal pipe header shall in the Blower Building shall be used to provide blower heat dissipation prior to connection to the buried ductile iron mains.
  - 2. Lateral piping shall be connected to the main air supply header with flanged connections.
  - 3. Each lateral pipe shall have a shutoff valve at the main header connection.
  - 4. Lateral pipes shall be anchored to shore.
  - 5. Diffuser connection ports shall be thermally fused onto the lateral piping.
  - 6. A length of feeder hose (as shown in the plans) shall be connected to the connection port with stainless steel clamps. The aeration diffuser shall be connected to the opposite end of the feeder hose.
- B. The aeration system including diffusers, lateral system, and feeder lines shall ensure that the lagoons do not have to be de-watered or drained for system installation or maintenance.
- C. Submerged aeration headers/laterals will not be accepted. PVC headers will also not be accepted.

#### 1.5 INFLUENT / EFFLUENT DESIGN VALUES

- A. Design aeration system based on the following design values:
  - 1. Average Design Flow           0.273 MGD
  - 2. CBOD5 (design):               397 lb/day
  - 3. TSS:                             454 lb/day
- B. Wastewater effluent parameters:
  - 1. CBOD5 (design):               <30 mg/L
  - 2. TSS (design):                 <30 mg/L

#### 1.6 AERATION DESIGN CRITERIA

- A. It is entirely the responsibility of the aeration equipment supplier to verify all design parameters. No allowance will be made for design errors or omissions that occur due to insufficient site investigation.

- B. Aeration Design Factors
  - 1. Alpha: 0.60
  - 2. Beta: 0.95
  - 3. Theta: 1.024
  - 4. Site Elevation: 45 ft
  - 5. Maximum Water Temperature: 68°F (20°C)
  - 6. Minimum Water Temperature: 32.9°F (0.5°C)
- C. Aeration system shall be designed transfer sufficient oxygen to accommodate loads from:
  - 1. cBOD removal
  - 2. Internal sludge digestion
- D. The average dissolved oxygen content shall be not less than 2.0 mg/L in any part of the aerated lagoons.
- E. Diffusers shall have a minimum SOTE of 23.8% at a diffuser submergence depth of 13.5 ft, and at a maximum diffuser flux rate of 1.70 SCFM/sq.ft
- F. Air distribution shall be designed to match the projected oxygen demand. Minimum requirements are as follows:
  - 1. Cell #1a: 3 laterals, 21 HT25-8 diffuser assemblies
  - 2. Cell #1b: 2 laterals, 9 HT25-8 diffuser assemblies
  - 3. Cell #2a: 2 laterals, 5 HT25-8 diffuser assemblies
- G. Submittals shall include complete aeration design calculations and results of ASCE Standard Oxygen Transfer Efficiency (SOTE) tests conducted by an independent laboratory.

#### 1.7 AIR SUPPLY REQUIREMENTS

- A. The aeration system requires an air supply meeting the following requirements (as per aeration system supplier design):
  - 1. Aeration design airflow: 385 SCFM
  - 2. Normal pressure: 7.8 psi
  - 3. Maximum pressure capability: 9.1 psi (intermittent)
  - 4. 100% standby capability

#### 1.8 QUALIFICATIONS AND EXPERIENCE

- A. The supplier shall have experience in the design, manufacturing, supplying, and commissioning of fine bubble diffuser aeration equipment of the type specified.
- B. Aeration equipment shall be of proven design and shall be referenced by at least ten (10) installations in cold climate (minimum four months of ice cover conditions) wastewater treatment lagoons of similar scope, having been in operation for not less than 3 years.

## 1.9 INSURANCE REQUIREMENTS

- A. System supplier shall maintain a minimum \$2,000,000 Errors and Omissions insurance policy acceptable to the client.

## 1.10 WARRANTY

- A. The aeration system Supplier shall provide written warranties for the aeration system.
- B. The Supplier shall repair or replace defective parts without charge to the Owner.
- C. Lateral Piping and Fittings Warranty
  - 1. Lateral piping and fittings shall be warranted to be free from defects in material and workmanship for a period of 24 months from the date of start-up.
  - 2. The cost for removal (disposal) and reinstallation of any defective parts during the warrantee period shall be the responsibility of the Owner
- D. Aeration Diffuser Warranty
  - 1. Aeration diffusers shall be warranted to be free from defects in material and workmanship for a period of 24 months from the date of start-up.
  - 2. The cost for removal (disposal) and reinstallation of any defective parts during the warrantee period shall be the responsibility of the Owner
- E. Floating Baffle Curtain System Warranty
  - 1. Floating baffle curtain system shall be warranted to be free from defects in material and workmanship for a period of 12 months from the date of installation.
  - 2. The cost for removal (disposal) and reinstallation of any defective parts during the warrantee period be the responsibility of the Owner.

## 1.11 SYSTEM PERFORMANCE GUARANTEE

- A. The Supplier is required to provide a system performance guarantee with submittals
- B. Aeration System Performance Guarantee
  - 1. Provide a written performance guarantee indicating that minimum average monthly dissolved oxygen levels in the aerated lagoons shall be within original design levels for a period of 24 months from the date of start-up.
  - 2. In the event that the minimum monthly average dissolved oxygen levels are not within design levels for a consecutive period of 90 days or 3 months, the Supplier shall at his own cost adjust the aeration equipment to bring the system within the design parameters.
  - 3. Detailed operation, maintenance, and testing logs shall be presented to the Supplier at the time that the Owner provides a written request for performance guaranty work.
  - 4. The performance guarantee is contingent upon the Owner adhering to the supplier/manufacturers operation and maintenance schedule, and that the system has been installed by approved installation personnel and under manufacturer's direct supervision.

## 1.12 APPROVAL OF ALTERNATES

- A. Contractor shall submit the base-bid tender based on the specified manufacturer's equipment. Drawings and design are based on the specified (named) manufacturer.
1. The Contract Administrator will not review un-named suppliers prior to the bid closing.
- B. Un-named Supplier
1. Should the Contractor wish to use a supplier not named in the Tender Documents, the contractor shall provide a full technical design package (including drawings) and regulatory approval with the bid submission.
  2. The technical submission shall be complete in that the Contract Administrator shall not require any further information in order to decide whether or not the un-named manufacturer will be accepted.
- C. Technical submission requirements for proposed alternate equipment shall include a list of a minimum of ten (10) installations in cold climate (minimum four months of ice cover conditions) wastewater treatment lagoons of similar scope, having been in operation for not less than 3 years. Information required for each installation shall include:
1. Name and location of facility, including operator contact information, engineer contact information, and owner contact information
  2. Design flows, organic loading, and effluent requirements
  3. Operating data including flows, influent/effluent quality
- D. Responsibility of the supplier/manufacturer
1. All design parameters to be verified. The supplier shall arrange for a site visit prior to bid closing to verify existing site conditions. No allowance will be made for design errors or omissions that occur due to insufficient site investigation
  2. Furnish complete, specific detailed information of the proposed alternate in which the requirements of the specifications are shown to be met or exceeded.
  3. This includes a point-by-point comparison of the specification requirements. Any submission in which there is a deviation from the specifications, or where insufficient information is provided, the submission will be considered incomplete, and the request for approval will be denied.
- E. Acceptability
1. The Contract Administrator will be the "sole judge" of acceptability and shall have the right to reject alternate manufacturers.
  2. Final review and evaluation of the proposed alternate will be carried out by the Contract Administrator after award. Final approval of proposed alternate will be based on the following but not limited to: technical submission, qualifications, experience, and project references.
- F. Associated Costs
1. The Contractor shall incur the cost of the engineering review, of alternate products/equipment, by the Contract Administrator. The Contractor shall also incur all costs for redesign, modification and special tests required by the contract administrator to accommodate the alternate equipment. This may include but not be limited to site grading, layout plan, mechanical, structural, architectural, and electrical systems.

2. All data to be provided by Contractor in support of any proposed "Approved Alternate" will be at the Contractor's expense.
3. All approved alternate equipment suppliers will be required to provide a performance bond equal to 100% of the equipment provided. Suppliers which do not meet the required experience shall be required to provide a performance bond equal to 150% of the equipment provided. All bonds will be issued for a two year time period.

## PART 2 - PRODUCTS

### 2.1 AERATION PIPING

- A. High-Density Polyethylene (HDPE) Pipe: butt-fused joints.
- B. The polyethylene pipe shall be PE3408, or PE3608, or PE4710, and conform to the requirements of ASTM D3350
- C. Minimum DR requirements shall be the more stringent of the following:
  1. For buried piping: DR17 for heavy traffic areas; DR21 for light traffic areas; DR21 for non-traffic areas.
  2. For other piping: DR17 for 4-inch (100 mm) piping, DR21 for 6-inch (150 mm) piping, DR21 for 8-inch (200 mm) and larger.
- D. Minimum aeration header pipe size: 4-inch (100 mm) diameter
- E. Flange assemblies: Polyethylene stub end manufactured to match the pipe, with ductile iron slip-on flange (out of water and buried service), and SS slip-on flange (in-water).
- F. Provide saddles, tees, reducers, and other fittings required for the installation shown.

### 2.2 DIFFUSERS AND FEEDER TUBING

- A. HT25-8 fine bubble membrane diffuser assemblies consisting of PVC support tubes with EPDM diffuser membranes connected to an HDPE distribution manifold
  1. Maximum dry weight of individual diffuser and ballast assembly shall be 50 lb to allow for safe manual retrieval.
  2. Each diffuser assembly shall consist of eight (8) 20-inch (500 mm) long membranes
  3. EPDM diffuser membranes shall be fully supported over entire length
  4. EPDM diffuser membranes shall have a design life space of not less than 10 years before replacement is required.
- B. Provide precast concrete diffuser ballast weight assemblies including FRP support brackets with an HDPE cover around perimeter of weight. No on-site ballast fabrication will be accepted.
- C. Each aeration diffuser shall be individually accessible from the water surface by boat. Aeration diffuser replacement shall require no more than a crew of two workers.



- D. Diffusers shall have a history of efficient operation, and freedom from clogging, excessive back pressures, or structural failure when applied to service conditions similar to those indicated for this project.
- E. Provide one (1) complete diffuser assembly and four (4) membrane assemblies as spare parts
- F. Feeder tubing used as the connection between the fine bubble diffuser and lateral piping shall be flexible PVC material reinforced with spiral polyester yarn; UV and weather resistant.
  - 1. Nominal inside diameter 1".
  - 2. Feeder tubing to be cut to length in factory.

### 2.3 LATERAL ANCHORING

- A. Each end of the floating laterals shall be held in place with a stainless steel cable, 1/4" diameter with a minimum breaking strength of 6,400 lbs, attached to anchor posts.
- B. A Self-Adjusting Tension assembly shall be located at the free end of the laterals and shall have the follow characteristics:
  - 1. Adjustment range: +/- 20"
  - 2. Tension assembly to provide a minimum constant tension force on lateral of 275 lb consisting of a pre-cast concrete counter-weight.
  - 3. Each tension assembly shall be equipped with winch for initial adjustments.
- C. Anchor posts
  - 1. 2.5" diameter, schedule 40 pipe - galvanized
  - 2. Minimum embedment of post in concrete pier: Per Drawings
  - 3. Maximum Length – Fixed post: per Drawings
  - 4. Minimum Length – Self-Adjusting Tension Assembly post: per Drawings
- D. Concrete Pier
  - 1. 18" diameter x 36" deep (minimum)
- E. Floating Baffle Curtain System
  - 1. Baffle curtain system shall be constructed with 8130 XR-5 polymer coated polyester reinforced geomembrane material as manufactured by Seaman Corporation, or approved equal. Baffle curtain material shall meet the following physical specifications:
 

a. Fabric Weight	6.5 oz./sq.yd.
b. Finished Coated Weight (ASTM D751)	30 oz./sq.yd.
c. Trapezoid Tear (ASTM D1117)	35/35 lbs. min.
d. Grab Yield Tensile ( ASTM D751)	550/550 lbs. min.
e. Elongation at Yield %	20% min.
f. Adhesion-Heat Seam (ASTM D751)	35 lbs / 2" dielectric weld min.
g. Adhesion-Ply (ASTM D413 2"min)	15 lbs./inch min.
h. Hydrostatic Resistance (ASTM D751)	800 psi. min.
i. Puncture Resistance (ASTM D4833)	250 lbs. min.
j. Bursting Strength (ASTM D 751 Ball Tip)	650 lbs. min.(800 lbs. typical)
k. Bonded Seam Strength(ASTM D751 )	550 lbs. min.
l. Weathering Resistance	8000 hrs. min.
m. Dimensional Stability (ASTM D 1204)	1%

- n. Water Absorption (ASTM D471, 7 days) 0.25 kg/sq.m @ 70 F.
- F. Baffle curtain system shall have unicellular plastic foam logs having a minimum buoyancy of 55 lbs./cu ft. Foam logs shall be dielectrically sealed into the flotation collar. The flotation collar shall be sized as required to adequately support the curtain and minimize sail area.
- G. A welded sleeve shall be provided beneath and adjacent to the flotation collar. A stainless steel cable shall be supplied in the sleeve. The SS cable shall be 1/4" diameter with a minimum breaking strength of 6,400 lbs.
- H. Baffle curtain system shall be weighted with 5/8" galvanized steel proof coil chain (1.67 lbs/ft) dielectrically sealed into the ballast collar on the bottom of the baffle. Chain shall be fastened at each end with stainless steel clamps or bolts.
- I. Ends of the curtain attaching to the shore anchors shall be reinforced. Stainless steel end plates shall be bolted to the reinforced area and used to attach the curtain to the end post with stainless steel cable and u-clamps.
- J. Flow-through window shall be designed for a maximum water velocity of 0.06562 ft/s (0.020 m/s) at average design flow.

#### 2.4 MISCELLANEOUS COMPONENTS

- A. Provide all other miscellaneous process equipment accessories including winches, stainless steel cable, concrete diffuser ballasts, rope, clamps, nuts/bolts, etc. as required for a complete system.

#### 2.5 SHIPPING

- A. All supplied aeration equipment shall be shop fabricated to the fullest extent possible to minimize installation time on site.
- B. All equipment shall be packaged and shipped within 20' long shipping containers, suitable for storage on site.
- C. Access to site is via barge access only. Supplier responsible to arrange for all transportation to site, and coordinate moving equipment to site with General Contractor.

### PART 3 - EXECUTION

#### 3.1 GENERAL

- A. The installer of the aeration system shall supply all materials, tools, equipment, and services necessary to install the aeration system.
- B. Install all supplied components in accordance with the manufacturer's instructions and in conformance with submitted shop drawings.

- C. The site shall be kept in a neat and orderly manner throughout the duration of the system installation.

### 3.2 AERATION PIPING & DIFFUSER INSTALLATION

- A. General Contractor shall provide all air valves, main air header piping, blower intake/discharge piping, and fittings as necessary to complete the aeration system as shown on the plans.
- B. Join HDPE pipe and fittings using the butt-fusion method, in accordance with the pipe manufacturer's instructions, and under the supervision of certified fusion technologists.
- C. Keep piping, during the progress of the work and on completion, free from obstructions and thoroughly clean. Remove foreign material from the pipe lines and ensure lines are free from leaks. Remove and replace any defective sections.
- D. Install HDPE lateral piping at flange connection locations as shown on the drawings.
- E. Install diffusers and feeder tubing in accordance with supplier's instructions at locations as shown on the drawings.
- F. Ensure adequate water levels in cell prior to any in-water equipment installation.

### 3.3 BAFFLE INSTALLATION

- A. Install floating baffles in accordance with supplier's instructions at locations as shown on the drawings.
- B. Ensure adequate water levels in cell prior to any in-water equipment installation.

### 3.4 MANUFACTURERS FIELD SERVICE

- A. Provide services of an experienced, competent, and authorized representative of the Manufacturer (Supplier). A minimum of two (2) trips with two (2) days each shall be allowed.
  - 1. Inspect equipment covered by these specifications
  - 2. Supervise any adjustments and installation checks
  - 3. Perform operation checks and tests as outlined below
  - 4. Perform start-up and commissioning of the system
- B. Perform air flow rate tests
  - 1. Testing shall be performed under full normal lagoon operational conditions
  - 2. RPM testing shall be performed on blower motor and block and correlated with factory generated blower performance curves to obtain airflows.
- C. Visually inspect aeration pattern
  - 1. Pattern shall be uniform at all diffuser locations
- D. If defects are revealed during testing, the Engineer may issue instructions for removal or correcting defective work and irregularities. If any material, in whole or in part, does not

conform to the Specifications or is found to be defective then such material shall be rejected by the Engineer and replaced.

### 3.5 COMMISSIONING

- A. Supplier shall provide start-up and commissioning for the system including on-site training of the Owner's operators. A minimum of one (1) trip with one (1) day shall be allowed. Trip may be combined with Manufacturers Field Service trip if schedule allows.
- B. Check the installation of all components and provide a written commissioning report to the Engineer upon completion of installation and commissioning.

END OF SECTION 46 07 53

## SECTION 46 51 00 - AIR MAIN AND VALVES

## PART 1 - GENERAL

## 1.1 SUMMARY

- A. General Description: Air Main System
  - 1. A system, including piping, valves, and trenching shall be provided to distribute air from the Blower Building to the air diffuser system at each Cell of the lagoon. The air main shall be 8-inch ductile iron as indicated.
- B. Section Includes:
  - 1. Buried Ductile Iron air manifold piping from the Blower Building to the aeration headers.
  - 2. Connection and Valves at Blower Building.
  - 3. Connection and Valves at aeration headers.
  - 4. Valve Replacement in Blower Building.
- C. Related Sections:
  - 1. SECTION 31 00 00 - EARTHWORK.
  - 2. SECTION 31 23 16 - TRENCHING.
  - 3. SECTION 46 07 53 - LAGOON AERATION EQUIPMENT.

## 1.2 REFERENCES

- A. American Water Works Association (AWWA)
  - 1. AWWA C110/A21.10 (2012) Ductile-Iron and Gray-Iron Fittings for Water
  - 2. AWWA C111/A21.11 (2017) Rubber-Gasket Joints for Ductile-Iron Pressure Pipe and Fittings
  - 3. AWWA C115/A21.15 (2011) Flanged Ductile-Iron Pipe With Ductile-Iron or Gray-Iron Threaded Flanges
  - 4. AWWA C151/A21.51 (2017) Ductile-Iron Pipe, Centrifugally Cast
  - 5. AWWA C504 (2015) Standard for Rubber-Seated Butterfly Valves
  - 6. AWWA C600 (Latest Edition) Installation of Ductile-Iron Mains and Their Appurtenances
- B. ASME International (ASME)
  - 1. ASME B16.1 (2015) Gray Iron Pipe Flanges and Flanged Fittings Classes 25, 125, and 250
  - 2. ASME B16.3 (2016) Malleable Iron Threaded Fittings, Classes 150 and 300
  - 3. ASME B16.5 (2017) Pipe Flanges and Flanged Fittings NPS 1/2 Through NPS 24 Metric/Inch Standard
  - 4. ASME BPVC SEC IX (2017; Errata 2018) BPVC Section IX-Welding, Brazing and Fusing Qualifications

### 1.3 SUBMITTALS

- A. Product Data: Materials and Equipment.
- B. Test Reports: Field Testing.

### 1.4 DELIVERY, STORAGE, AND HANDLING

- A. All equipment delivered and placed in storage shall be stored with protection from the weather, excessive humidity and excessive temperature variation; and dirt, dust, or other contaminants.

## PART 2 - PRODUCTS

### 2.1 MATERIALS AND EQUIPMENT

#### A. Ductile Iron Pipe

- 1. Ductile iron pipe shall conform to AWWA C115/A21.15 or AWWA C151/A21.51. Thickness class shall be as follows: up to 4-inch (100 mm) diameter and over 30-inch (750 mm) diameter shall be Class 51; 6-inch (150 mm) through 24-inch (600 mm) diameter shall be Class 50. Mechanical joints shall conform to AWWA C111/A21.11 as modified by AWWA C151/A21.51. Flanged joints shall conform to AWWA C115/A21.15. Fittings shall conform to AWWA C110/A21.10. Buried piping shall have standard bituminous coating and lining.

#### B. Butterfly Valves

- 1. Butterfly valves within the Blower Building shall be replaced as indicated. Butterfly valves and operators shall conform to AWWA C504, air service class, flanged or mechanical joint ends as required.
- 2. Butterfly valves shall be lug style with epoxy coated ductile iron body, EPDM seat securely keyed into the body, aluminum bronze disc, stainless steel stem, dual PTFE stem bearings, lever operator with lockable handle, 150 psi rating. NIBcoLD-2000, FNW Fig 7.12, or equal.

## PART 3 - EXECUTION

### 3.1 EXAMINATION

- A. After becoming familiar with all details of the work, verify all dimensions in the field, and advise the Contracting Officer of any discrepancy before performing the work.

### 3.2 AIR DISTRIBUTION MAIN INSTALLATION

- A. The air distribution system shall be installed as indicated and in accordance with the manufacturer's written instructions. Excavation, trenching, and backfilling shall be in

accordance with the applicable requirements. The crown of the air main shall be maintained at the same elevation.

### 3.3 FIELD QUALITY CONTROL

#### A. Field Testing

1. Submit performance test reports in booklet form showing all field tests performed to adjust each component and all field tests performed to prove compliance with the specified performance criteria, upon completion and testing of the installed system.
2. Hydrostatic Testing:
  - a. Hydrostatic testing shall be per AWWA Standard C600, latest edition.
  - b. All piping and valves shall be tested for at least 2 hours and such additional time as is required for the Engineer to inspect the piping for leaks. All leaks shall be repaired and the system shall be retested until no leakage is discovered.

END OF SECTION 46 51 00

**CITY OF DILLINGHAM, ALASKA**  
**AERATED LAGOON FACILITY IMPROVEMENTS**

**PERMITS**





THE STATE  
of **ALASKA**  
GOVERNOR MIKE DUNLEAVY

Department of Environmental Conservation  
DIVISION OF WATER  
555 Cordova Street, 3<sup>rd</sup> floor  
Anchorage, AK 99501  
Bill Rieth: 907.269.7519

April 15, 2021

Vanessa Wike, P.E.  
Bristol Engineering Company, LLC  
111 W 16<sup>th</sup> Ave., Suite 301  
Anchorage, Alaska 99501-5109

Re: Dillingham-Tower Road-Addition to the Lagoon Type Wastewater Treatment System at the Design Location-.Change Order-ADEC Plan Tracking Number 27975

Dear Ms. Wike,

On April 1, 2021 a letter requesting a time extension for this project was submitted by the owner. The letter said that both the Corvid Pandemic and unanticipated funding delays were delaying the project. The project had been given two years to be accomplished in, which would have been this April 10, 2021.

In the meantime we are noticing that ammonia as a limit is becoming a concern in our permits. Your current design does not address this limit. Please add how the facility will meet the further needs if this limit is put into effect in the next three years. (April 10, 2025 for treatment in future of that date)

Addressing the older engineering plans and the documentation of construction forms along with in person meeting had taken place concerning the Dillingham Lagoon and the Wastewater Treatment facility for the City with up to (273,000 gpd). The plans propose a pretreatment facility for the sludge waste which consists of a new holding lagoon that is 52 feet by 92 feet thus 4784 ft<sup>2</sup> in surface area and has an effective depth of 6 feet. This volume is expected to provide a year's storage of the pumped sludge waste and has a stop log arrangement for it's discharge system.

The existing two cells with an area of 50,600 ft<sup>2</sup> each will receive new fine bubble membrane diffusers (HT25-8) to better treat the wastewater. The increased summer flow requires the first cell to be setup for increased aeration with a winter normalized flow within the second cell which is split into a 2/3 then 1/3 set up with aeration in the larger part and a recovery then discharge arrangement. New piping for the blower units will be dual 8 inch Ductile Iron Pipe (DIP) header with 4 inch diameter HDPE laterals to the aeration units in the lagoon.

The curtain in the second cell is a Seaman Corp 81-30 XR-5 Membrane (or equal) to divide the second cell and new valves are NIBCOLD-2000 FNW (or equal). The contracting officer's representative will make the determination and selection. Please advise along with the record drawings as to these items selected, if changed.

The plans also show additional needed piping and use of the existing piping where it is expected to be in serviceable condition.

The changing to the winter bypass line and effluent discharge are required to meet all requirements of the Alaska Pollutant Elimination Discharge System (APDES) permit (AKG-573004).

The Department has reviewed the engineering plans submitted for the 2019 installation to improve the domestic wastewater system as a first phase of the work and per the Wastewater Regulations 18 AAC 72.235 a conditional approval to construct is issued for the domestic wastewater system. A completed "Certificate of Construction" so marked for the domestic wastewater system is enclosed. Please use the referenced plan number in correspondence regarding this project.

**This approval is contingent upon compliance with the following conditions:**

- 1) The engineer must provide site inspections to assure that the design is maintained. Please provide a list to this office of service providers with their contact information to allow corrective action to be allowed to be addressed. If authorizations are required it is up to the person listed on the list to obtain this clearance. A maintenance and operations manual will be required to assure proper operations, please provide a copy for review of this document. Please also identify on the Record Drawings any deviations from this plan to allow for our review.
- 2) If the applicant fails to construct, alter, install, or modify the system within three (3) years after the date that the department issues an approval to construct which is now extended to April 10, 2025, the approval is void, and plans must be resubmitted, [along with associated fees], for department review and approval.
- 3) Deviations from approved plans which affect capacity, flow, operation, major design of units, point of discharge, materials of major system components (such as pipe, lagoon liners, etc.), or separation distances, must be approved by DEC in writing prior to their implementation or construction.
- 4) This approval is contingent upon compliance with the conditions of Wastewater Disposal Regulations, 18 AAC 72.235, *Construction Certification*. The noted section of the regulations requires that a "*Certification of Construction*" be completed and submitted to the Department within ninety (90) days of completion of construction. As-built plans or record drawings should indicate any changes or deviations from the approved plans to facilitate final review. A "*Certification of Construction*" form is enclosed for your use.
- 5) This approval is contingent upon your receipt of any other state, federal or local authorizations which are required for your project. You are required to obtain all other necessary authorizations before proceeding with your project.
- 6) You are advised that if this development will require placing fill in wetlands or working in a stream, river, or lake, permits from the U.S. Army Corps of Engineers and the Alaska Department of Natural Resource may be required. The previously required Coastal Projects Questionnaire could be helpful to you to identify other permits and approvals that may be required for your project.

This approval does not imply the granting of additional authorizations nor obligate any state, federal or local regulatory body to grant required authorizations.

Any person who disagrees with this decision may request an adjudicatory hearing in accordance with 18 AAC 15.195- 18 AAC 15.340 or an informal review by the Division Director in accordance with 18 AAC 15.185. **Informal review requests** must be delivered to the Division Director, 555 Cordova, Anchorage, Alaska 99501, within 20 days of receiving the decision. Guidance information on the informal review process may be found at <http://www.dec.state.ak.us/commish/Review-Guidance.htm>. **Adjudicatory hearings requests** must be delivered to the Commissioner of the Department of Environmental Conservation, P.O. Box 111800, Juneau, Alaska 99801, within 30 days of the decision. If a hearing is not requested within 30 days, the right to appeal is waived.

Thank you for your cooperation. If you have any questions please do not hesitate to contact me at 269-7519.

Respectfully,

A handwritten signature in blue ink that reads "William R. Rieth". The signature is written in a cursive style with a large initial "W".

William R. Rieth, P.E.  
Environmental Engineer





STATE OF ALASKA  
 DEPARTMENT OF ENVIRONMENTAL CONSERVATION  
 CONSTRUCTION AND OPERATION CERTIFICATE

for

DOMESTIC WASTEWATER DISPOSAL SYSTEMS  
 DILLINGHAM TOWER ROAD - ADDITION & CHANGED TO THE AERATED  
 LAGOON TYPE WASTEWATER SYSTEM - ADEC PLAN TRACKING NUMBER 27975

A. APPROVAL TO CONSTRUCT

Plans for the construction or modification of PRE TREATMENT ADDED FINE BUBBLE  
MEMBRANE DIFF (HT25-8) - CURTAIN & IMPROVED CONTROLLED FLOW - NEW VALVES  
 domestic wastewater disposal system

located in DILLINGHAM, Alaska, submitted in accordance with 18 AAC 72.225,

by VANESSA WIKES PE-BRISTOL have been reviewed and are

approved.

conditionally approved (see attached conditions). see letter this date

William R. Peeth  
 BY

Environmental Engineer April 10, 2019  
 TITLE DATE

If construction has not started within two years of the approval date, this certificate is void and new plans and specifications must be submitted for review and approval before construction.

B. APPROVED CHANGE ORDERS

Change (contract order no. or descriptive reference)

An extension till April 10, 2025  
also concern for new permit limits maybe  
being altered see letter this date.

Approved by

Date

William R. Peeth

April 15, 2021

C. APPROVAL TO OPERATE

The "APPROVAL TO OPERATE" section must be completed and signed by the Department before this system is made available for use.

The construction of the \_\_\_\_\_ domestic wastewater disposal system was completed on \_\_\_\_\_ (date). The system is hereby granted interim approval to operate for 90 days following the completion date.

BY

TITLE

DATE

As-built plans submitted during the interim approval period, or an inspection by the Department, has confirmed the system was constructed according to the approved plans. The system is hereby granted final approval to operate.



THE STATE  
of **ALASKA**  
GOVERNOR MICHAEL J. DUNLEAVY

## Department of Environmental Conservation

DIVISION OF WATER

555 Cordova Street  
Anchorage, Alaska 99501  
Main: 907.269.7502  
Fax: 907.269.7509  
[www.dec.alaska.gov](http://www.dec.alaska.gov)

September 22, 2020

Ms. Cynthia Rogers  
Director, Planning & Grants Management  
City of Dillingham  
P.O. Box 889  
141 Main Street  
Dillingham, AK 99576

Re: Environmental Review Public Notice for Wastewater System Upgrades

Dear Ms. Rogers:

I have received your request for environmental review for the Wastewater System Upgrades project, Alaska Clean Water Fund (ACWF) Loan number 283101, and have determined that this work meets the criteria for a Categorical Exclusion. In conformance with the criteria and requirements of Alaska Administrative Code 18 AAC 76.040 and the state environmental review procedure, a public notice of this decision was published online on the Alaska Department of Environmental Conservation Office of the Commissioner's Public Notice webpage. A copy of the online Public Notice is enclosed for your records.

This completes the environmental review requirement for the project description and location that were provided in your request. Any project changes made during design or construction that impact the scope or project area may require additional environmental review. Please notify me, as well as Beth Verrelli, project engineer, immediately if any such changes are made.

While the environmental portion of this project is complete, other steps may still be needed before reimbursements can be made. Please contact Beth Verrelli at 269-7603 with any questions regarding the status of this project.

Sincerely,

A handwritten signature in black ink, appearing to read "Adele Fetter".

Adele Fetter  
Environmental Impact Analyst  
DEC, Division of Water

Enclosure: online public notice



DEPARTMENT OF THE ARMY  
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
REGULATORY DIVISION  
P.O. BOX 6898  
JBER, AK 99506-0898

August 11, 2020

Regulatory Division  
POA-2020-00212

City of Dillingham  
Attention: Cynthia Rodgers  
Post Office Box 889  
Dillingham, Alaska 99576

Dear Ms. Rodgers:

This is in response to your July 9, 2020, request for a Department of the Army (DA) General Permit verification to discharge 971 cubic yards (CY) of fill into 0.26-acres of Palustrine wetlands for the construction of a pretreatment pond and a discharge pipe to the existing wastewater treatment plant. The project site is located within Section 16 & 21, T. 13S., R. 55W., Seward Meridian; USGS Quad Map Dillingham A-7; Latitude 59.043538° N., Longitude -158.42570° W.; in Dillingham, Alaska.

DA permit authorization is necessary because your project would involve work in and placement of dredged and/or fill material into waters of the United States (U.S.) under our regulatory jurisdiction.

A Department of the Army General Permit (GP) **07, Rural Development**, issued on **September 6, 2019**, authorizes the RGP-07, Rural Development, the discharge of dredged and/or fill material into waters of the U.S. for the purpose of constructing and/or expanding building foundation pads, utilities, roads, driveways, and parking areas for residential and community developments. The RGP also authorizes mechanized land clearing and other activities that will result in a re-deposition of dredged material into waters of the U.S.

Based upon the information and plans you provided, we hereby verify that the work described above, which would be performed in accordance with the enclosed plan (sheets 1-7), dated July 21, 2020, is authorized by GP **07**. GP **07** and its associated Conditions can be accessed at our website at: [www.poa.usace.army.mil/Missions/Regulatory/Permits/RegionalGeneralPermits](http://www.poa.usace.army.mil/Missions/Regulatory/Permits/RegionalGeneralPermits) or, at your request, a paper copy will be provided to you. Please note that the time limit for authorizing work under this GP ends on September 30, 2024. If you will not complete the authorized work by September 30, 2024, please contact this office for information on a time extension. You must comply with all terms and conditions associated with GP **07**, as well as with the special conditions listed below:

1. **Fill Material:** The Permittee shall use only clean fill material for this project. The fill material shall be free from items such as trash, debris, automotive parts, asphalt, construction materials, concrete blocks with exposed reinforcement bars, and soils contaminated with any toxic substance, in toxic amounts in accordance with Section 307 of the Clean Water Act.
2. **Hydrology Maintenance:** The Permittee shall ensure that the project minimizes alterations to water circulation patterns to the extent practicable. If it is determined by the Corps of Engineers (Corps) that the project negatively impacts the hydrology within the wetland, the Permittee may be required to take additional measures (i.e. install additional depressed road beds, culvert(s), or a similar water conduit) beneath the road to re-establish the hydrology of the area to that of pre-construction conditions.
3. **Self-Certification:** Within 60 days of completion of the work authorized by this permit, the Permittee shall complete the attached "Self-Certification Statement of Compliance" form (Attachment 2) and submit it to the Corps (U.S. Army Corps of Engineers, Regulatory Division, P.O Box 6898 JBER, Alaska 99506-0898). In the event that the completed work deviates in any manner from the authorized work, the Permittee shall describe the deviations between the work authorized by this permit and the work as constructed on the "Self-Certification Statement of Compliance" form. The description of any deviations on the "Self-Certification Statement of Compliance" form does not constitute approval of any deviations by the Corps.

If changes to the activity are planned, including a change in use of the site, a change in lease or ownership, or additional placement of dredged and/or fill material, please notify this office as soon as possible. We will then confirm that authorization would continue under the GP or notify you of any additional requirements and/or authorizations.

This verification that your proposed work is authorized under the GP shall not be construed as excusing you from compliance with other Federal, State, or local statutes, ordinances, or regulations that may affect this work.

Please contact me via email at: [Nicholas.Lucore@usace.army.mil](mailto:Nicholas.Lucore@usace.army.mil), by mail at the address above, by phone at (907) 753-5783, or toll free from within Alaska at (800) 478-2712, if you have questions. For additional information about our Regulatory Program, visit our web site at: [www.poa.usace.army.mil/Missions/Regulatory](http://www.poa.usace.army.mil/Missions/Regulatory).

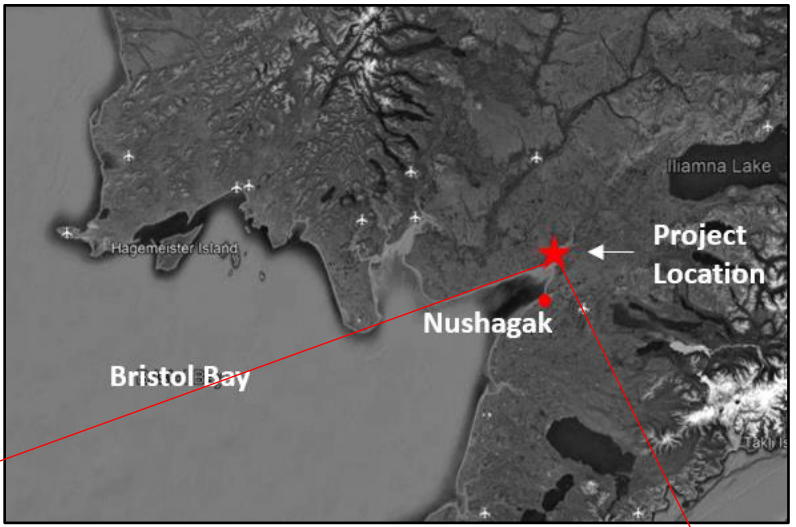
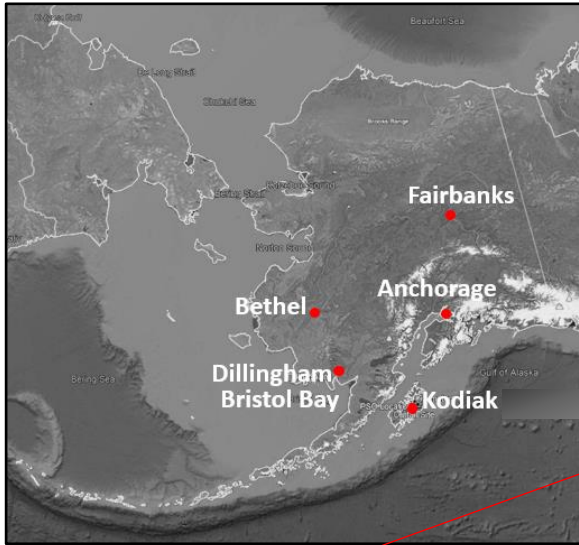
Sincerely,



Nichols Lucore  
Regulatory Specialist

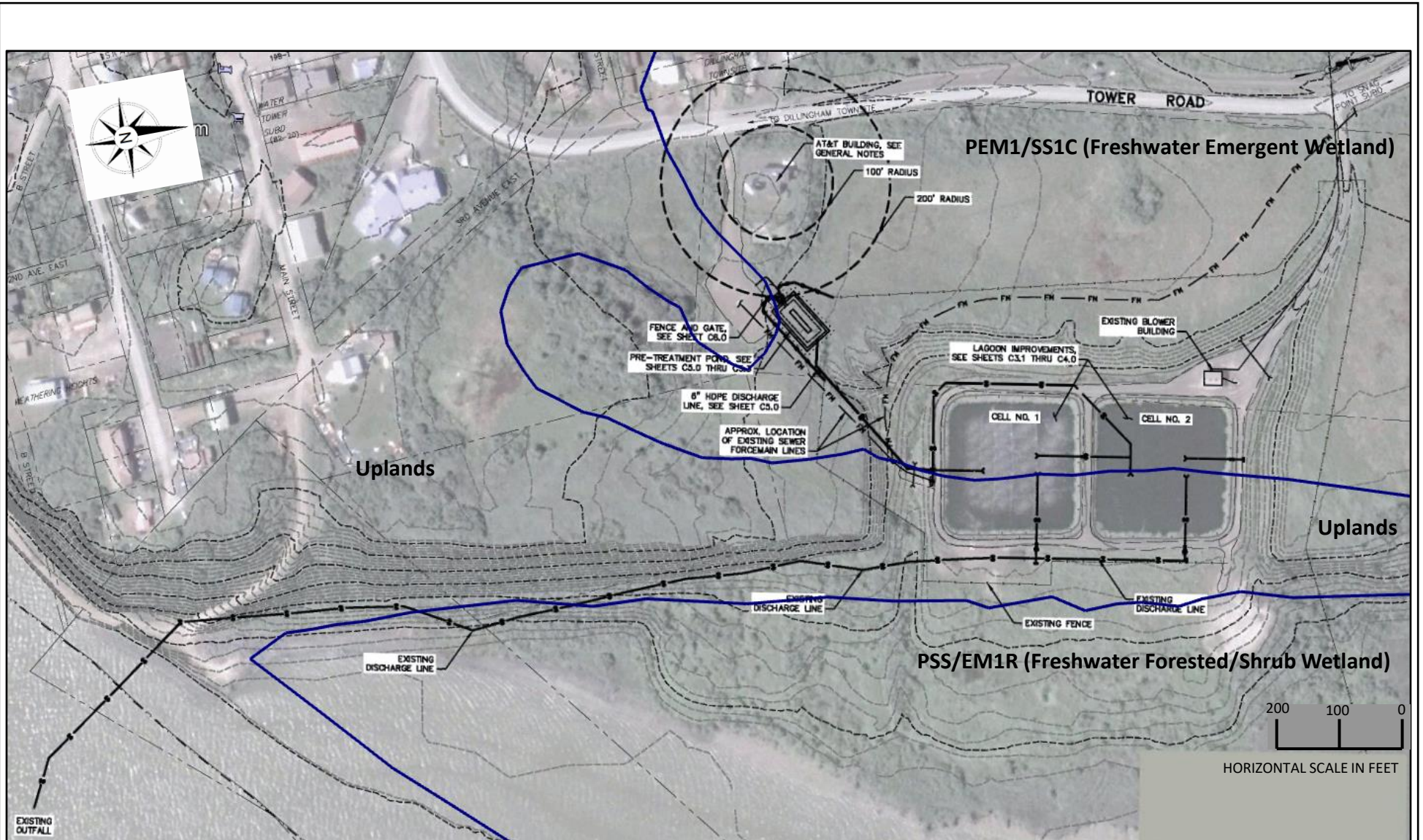
Enclosures  
Project Drawings dated July 21, 2020



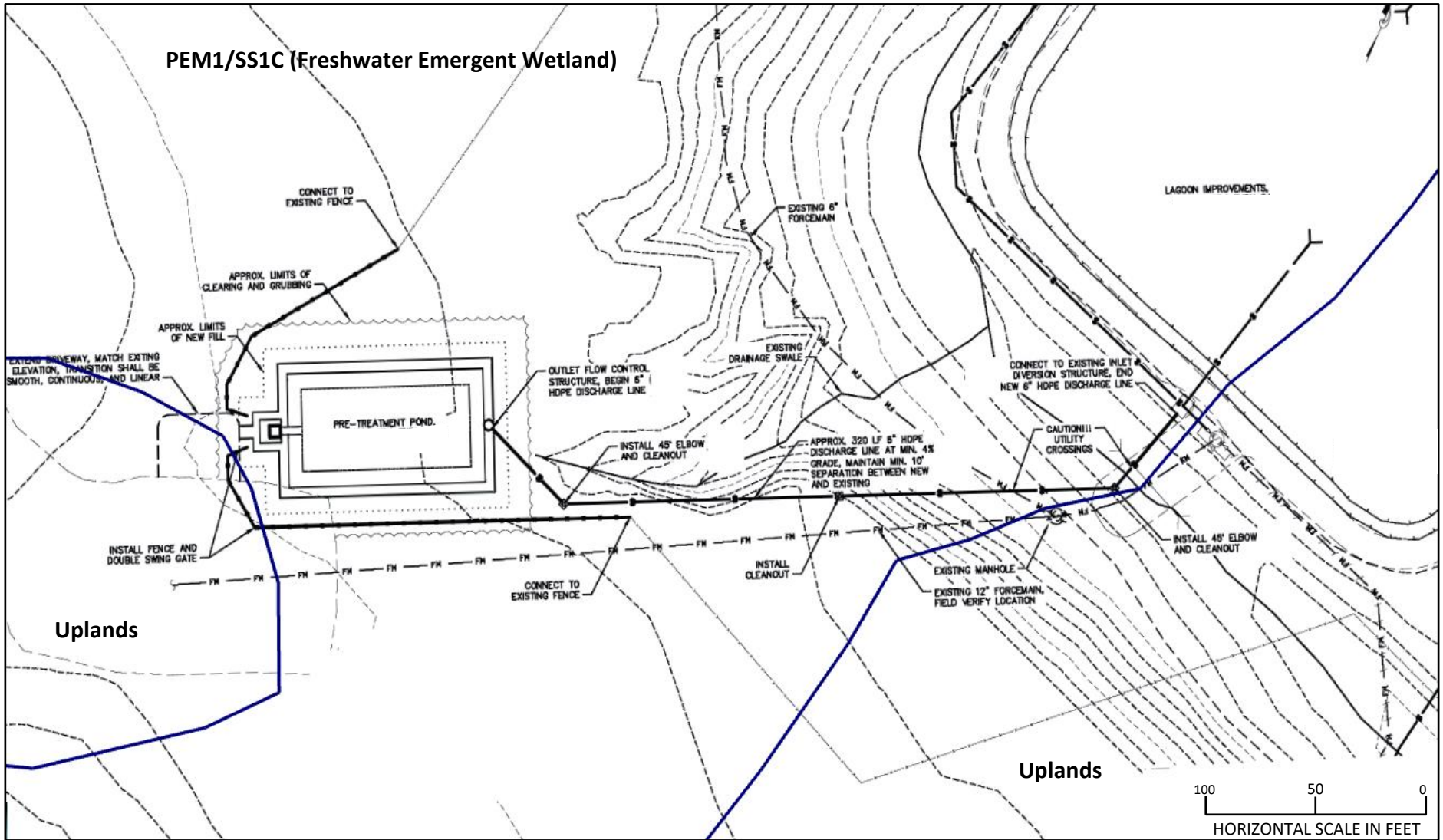


**Project Location and Vicinity Map**  
**Project:** Aerated Lagoon Facility Improvements Dillingham, Alaska  
**POA-XXXX-XX**  
**Applicant:** City of Dillingham  
 June 2020  
 Figure: 1 of 7





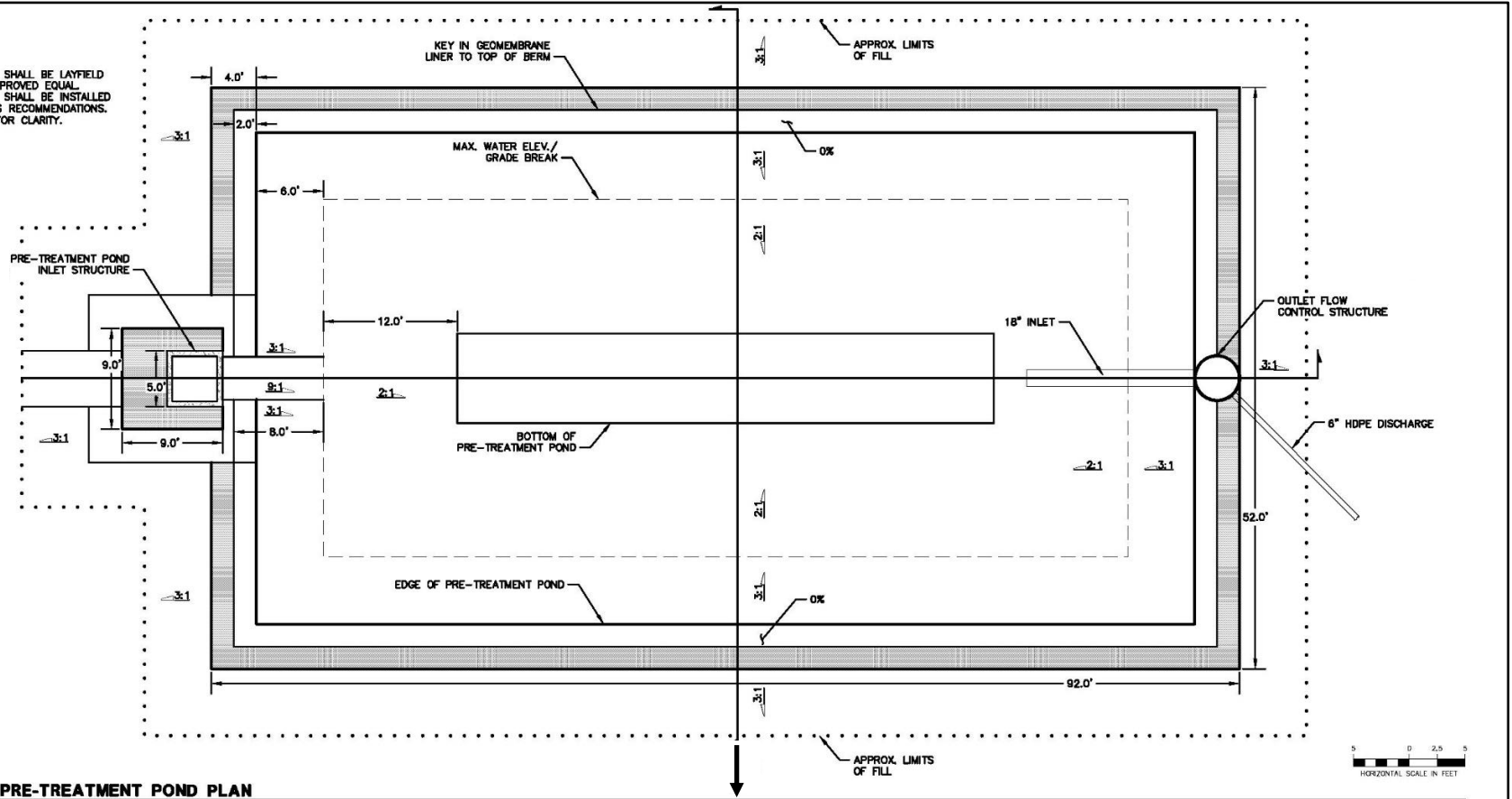
**Approximate Wetland Location Map**  
**Project:** Aerated Lagoon Facility Improvements Dillingham, Alaska  
**POA-XXXX-XX**  
**Applicant:** City of Dillingham  
 June 2020  
 Figure: 2 of 7



**Pretreatment Pond and Pipe Site Plan**  
**Project:** Aerated Lagoon Facility Improvements Dillingham, Alaska  
**POA-XXXX-XX**  
**Applicant:** City of Dillingham  
 June 2020  
 Figure: 3 of 7

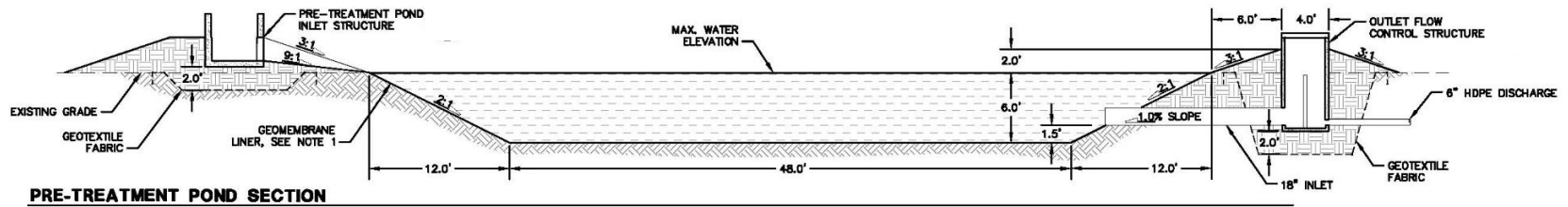


- NOTES:**
1. GEOMEMBRANE LINER SHALL BE LAYFIELD HAZGARD 100 OR APPROVED EQUAL.
  2. GEOMEMBRANE LINER SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS.
  3. FENCE NOT SHOWN FOR CLARITY.



**PRE-TREATMENT POND PLAN**

SCALE: SHOWN



**PRE-TREATMENT POND SECTION**

SCALE: NTS

**Pretreatment Pond Design Plan**

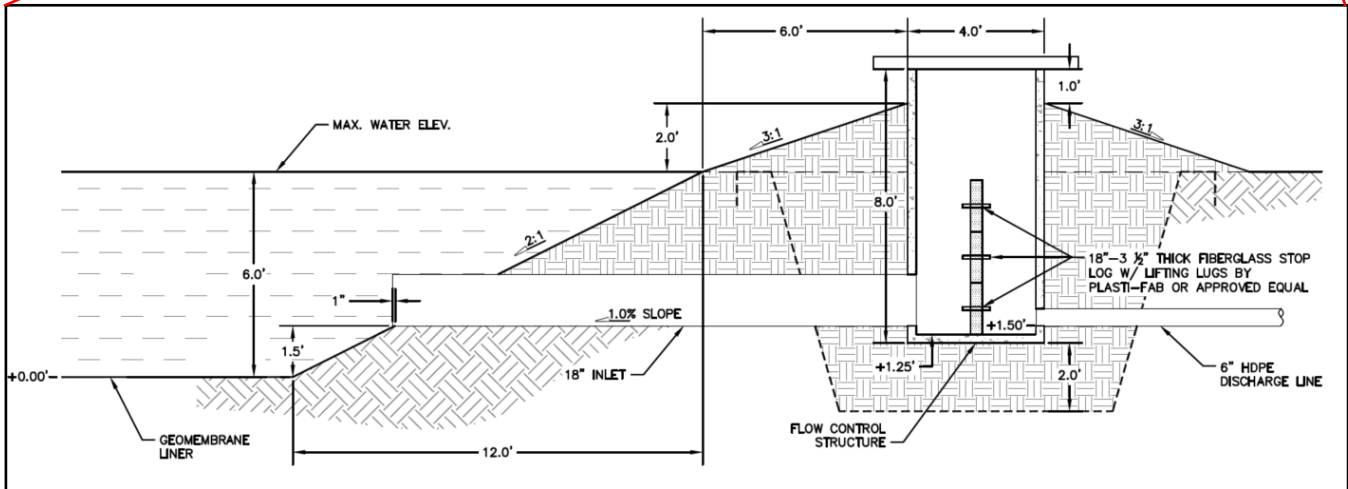
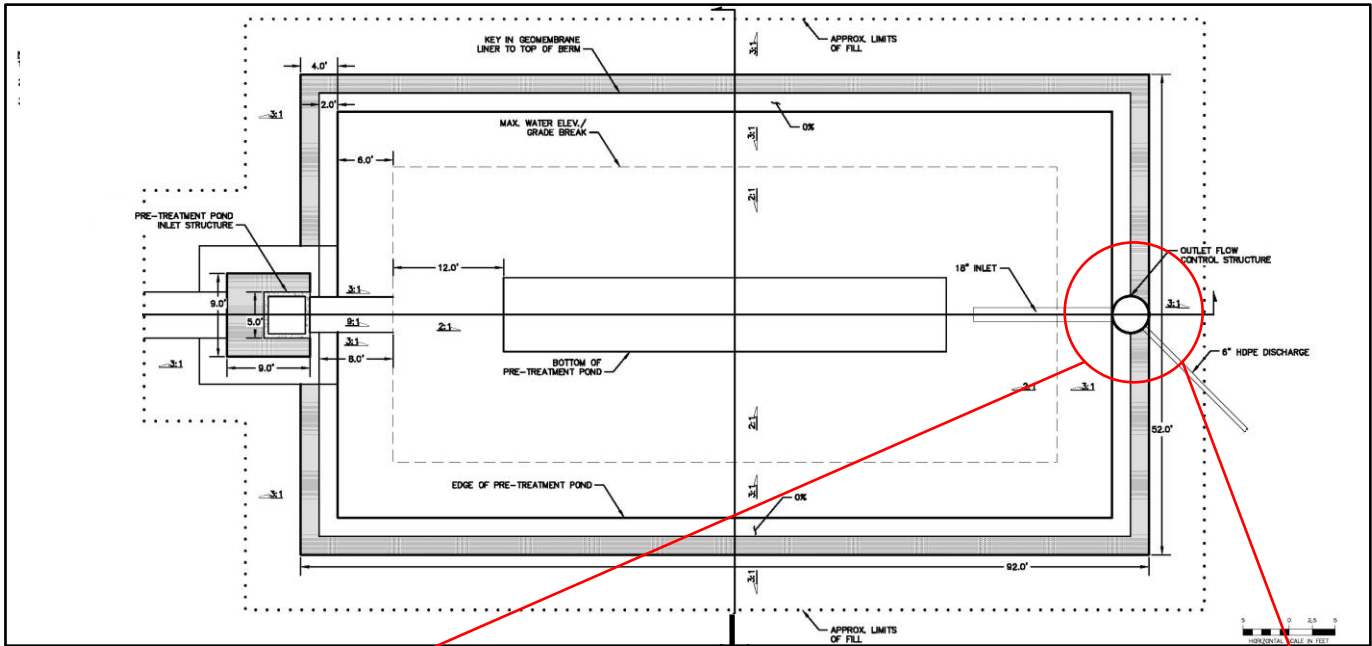
**Project:** Aerated Lagoon Facility Improvements Dillingham, Alaska

POA-XXXX-XX

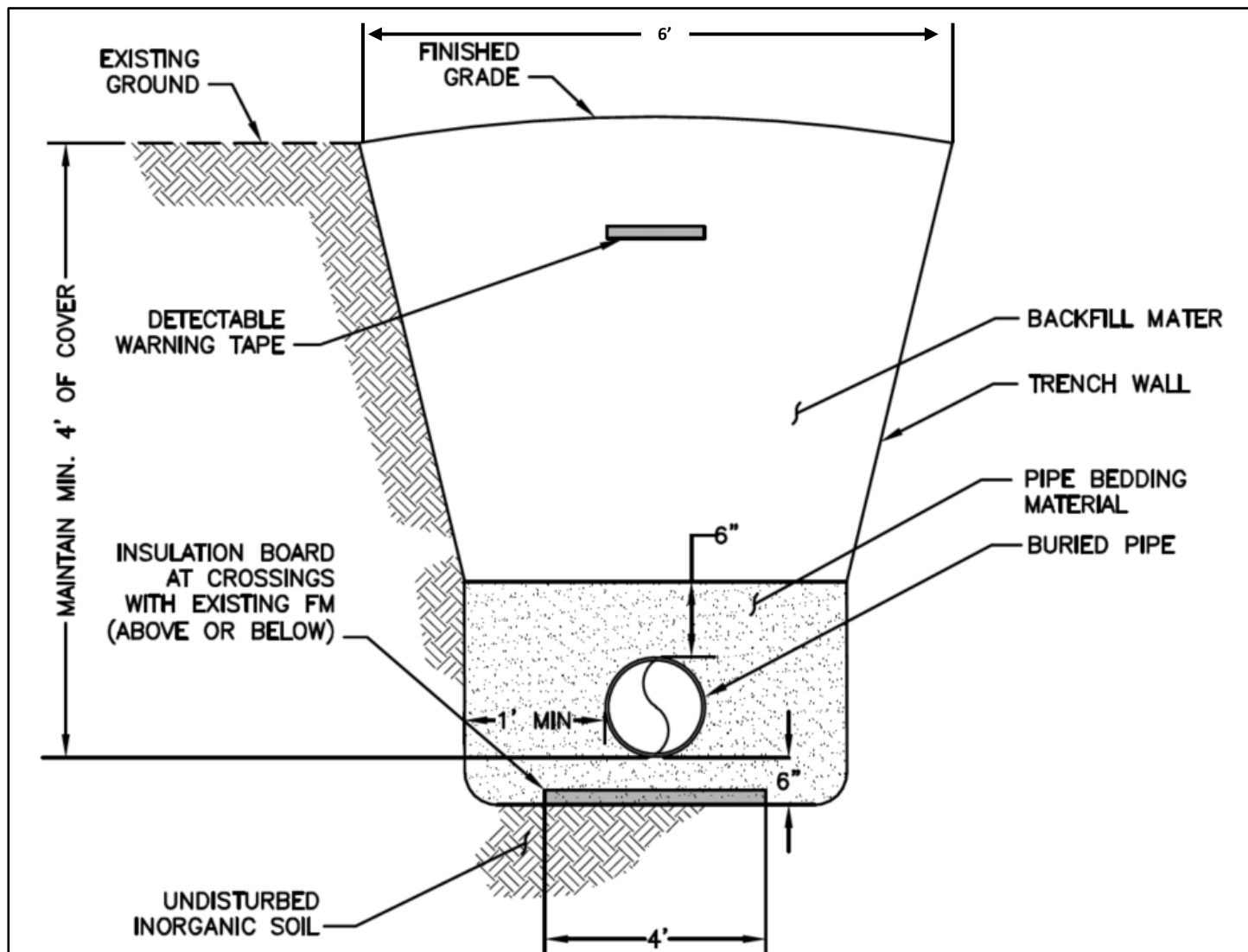
**Applicant:** City of Dillingham

June 2020

Figure: 4 of 7



**Pretreatment Pond Outlet Design Plan**  
**Project:** Aerated Lagoon Facility Improvements Dillingham, Alaska  
**POA-XXXX-XX**  
**Applicant:** City of Dillingham  
 June 2020 Figure: 5 of 7



**Trench Details**

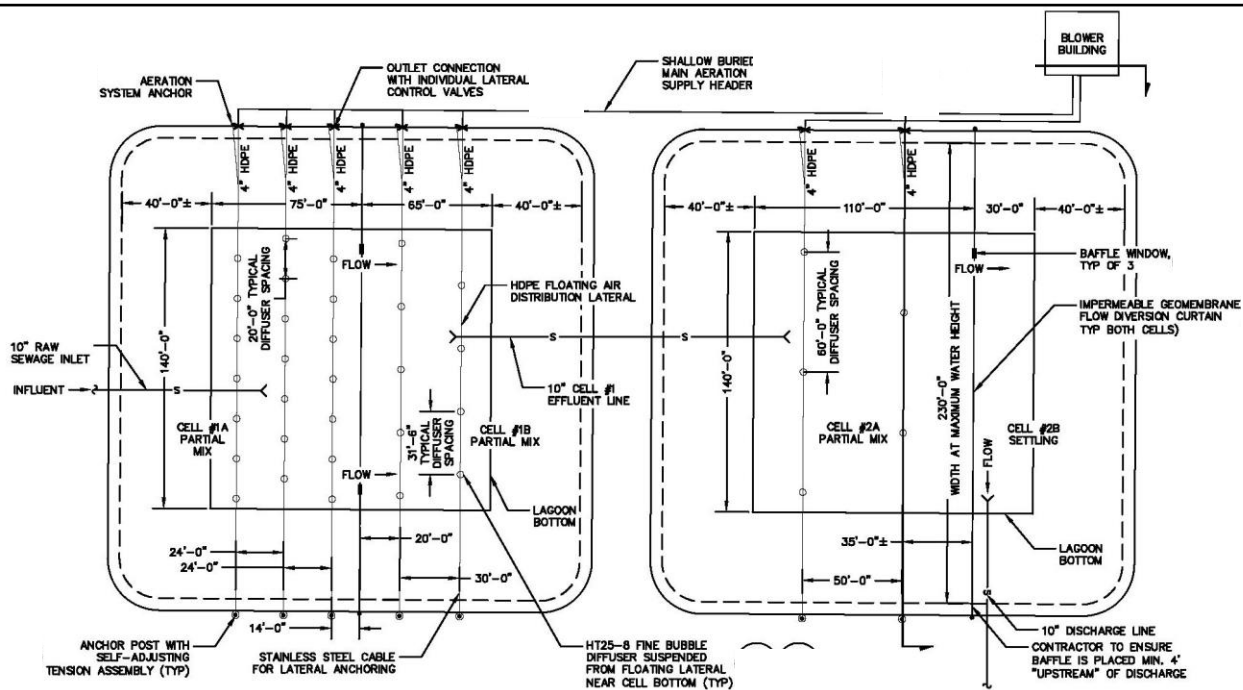
**Project:** Aerated Lagoon Facility Improvements Dillingham, Alaska

POA-XXXX-XX

**Applicant:** City of Dillingham

June 2020

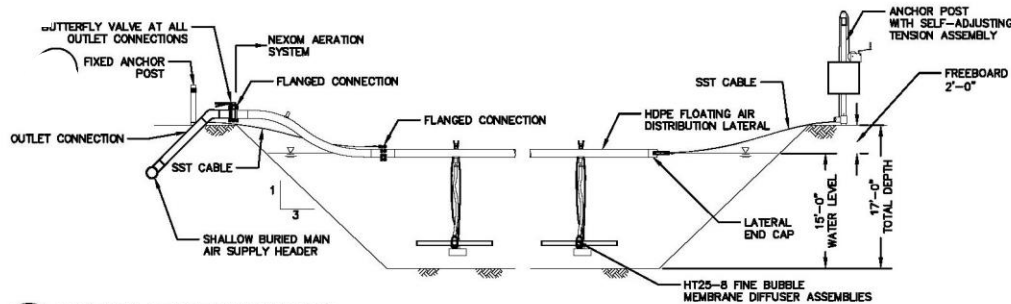
Figure: 6 of 7



- NOTES:**
1. AERATION SYSTEM SHALL CONSIST OF NEXOM OPTAER COMPONENTS OR APPROVED EQUAL. ANY ALTERNATE AERATION SYSTEM MUST INCLUDE REGULATORY APPROVAL, PRIOR TO BID DATE, TO BE CONSIDERED EQUAL.
  2. LAGOON SYSTEM SHALL REMAIN IN OPERATION DURING IMPROVEMENTS CONSTRUCTION.
  3. CONTRACTOR SHALL NOT INSTALL ANCHOR POST FOR AERATION AND BAFFLE SYSTEMS WITHOUT LAYOUT APPROVAL FROM THE ONSITE ENGINEERING IN WRITING.

**LAGOON AERATION LAYOUT PLAN**

SCALE: NTS



**LAGOON AERATION SECTION**

SCALE: NTS

**Aeration System Layout Design Plan**  
**Project:** Aerated Lagoon Facility Improvements Dillingham, Alaska  
**POA-XXXX-XX**  
**Applicant:** City of Dillingham  
 June 2020 Figure: 7 of 7



# Land Clearing Timing Guidance for Alaska

## *Plan Ahead to Protect Nesting Birds*

### **General Information:**

Under the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703) (see <http://ipl.unm.edu/cwl/fedbook/mbta.html>), it is illegal for anyone to "take" migratory birds, their eggs, feathers or nests. "Take" includes by any means or in any manner, any attempt at hunting, pursuing, wounding, killing, possessing or transporting any migratory bird, nest, egg, or part thereof. Take and possession under MBTA can be authorized through regulations, such as hunting regulations, or permits, e.g., salvage, research, depredation, or falconry. The MBTA does not distinguish between intentional and unintentional take. In Alaska, all native birds except grouse and ptarmigan (protected by the State of Alaska) are protected under the MBTA.

Destruction of active bird nests, eggs, or nestlings that can result from spring and summer vegetation clearing, grubbing, and other site preparation and construction activities would violate the MBTA. The following timing guidelines are not regulations, but are intended as recommendations to help you comply with the MBTA. Some species and their nests have additional protections under other federal laws, including those listed under the Threatened and Endangered Species Act (ESA), and bald and golden eagles (protected under the Bald and Golden Eagle Protection Act or BGEPA). Please contact the U.S. Fish and Wildlife Service to ensure compliance with ESA and BGEPA if these species may be present in your project area.

### **Directions:**

1. Apply timing window guidelines to your project planning, unless project-specific review results in unique guidelines from the USFWS for your project.
2. If you encounter an active nest *at any time*, including before or after the local timing window, leave it in place and protected until young hatch and depart. "Active" is indicated by intact eggs, live chicks, or presence of adult on nest. Timing guidelines should considerably reduce the risk of inadvertent nest destruction, but final compliance with the law is your responsibility: do not destroy eggs, chicks, or adults of wild bird species.
3. If you have any questions regarding the MBTA and the timing guidelines, including projects that may occur in "boundary areas" between regions described on the matrix, contact your local Fish and Wildlife Field Office for assistance:

Anchorage (907) 271-2888  
Fairbanks (907) 456-0203

Kenai (907) 262-9863  
Juneau (907) 780-1160



**Recommended Time Periods to Avoid Vegetation Clearing**

HABITAT TYPE →	Forest or woodland <sup>1</sup> (i.e., trees present)	Shrub or Open (i.e., shrub cover or marsh, pond, tundra, gravel, or other treeless/shrubless ground habitat)	Seabird colonies (including cliff and burrow colonies)	Raptor and raven cliffs
REGION ↓				
Southeast	April 15 – July 15	May 1 – July 15 <sup>2</sup>	May 1 – September 15 <sup>3</sup>	April 10 – August 10
Kodiak Archipelago			April 15 – September 7 <sup>3</sup>	
Southcentral (Lake Iliamna to Copper River Delta; north to Talkeetna)	May 1 – July 15 <sup>2</sup>			
Bristol Bay/AK Peninsula (north to Lake Iliamna)	April 10 – July 15	May 1 – July 15 <sup>2, 4</sup>	May 10 – September 15	
Interior (north of Talkeetna to south slope Brooks Range; west to treeline)	May 1 – July 15 <sup>2</sup>		May 1 – July 20 <sup>5</sup>	April 15 – August 1
Aleutian Islands		April 25 – July 15	May 1 – September 15 <sup>3</sup>	April 1 – August 1
Yukon-Kuskokwim Delta (east to treeline)		May 5 – July 25 <sup>2, 4</sup>	May 20 – September 15	April 15 – August 15
Seward Peninsula		May 20 – July 20 <sup>4</sup>		
Northern (includes northern foothills of Brooks Range)		June 1 – July 31 <sup>4</sup>		
Pribilof and Bering Sea Islands		June 1 – July 15	May 25 – September 1	

USFWS July 2009

<sup>1</sup> Owl species may begin to nest two or more months earlier than other forest birds, and are fairly common breeders in forested areas of Alaska. You may wish to survey for nesting owls (or other early spring tree-cavity nesters) prior to tree-cutting. It is your responsibility to protect active nests from destruction.

<sup>2</sup> Canada geese and swan habitat: begin April 20

<sup>3</sup> Storm petrel burrow habitat: April 1 – October 15

<sup>4</sup> Black scoter habitat: through August 10

<sup>5</sup> Seabird colonies in Interior refer to terns and gulls



**CITY OF DILLINGHAM, ALASKA**  
**AERATED LAGOON FACILITY IMPROVEMENTS**

**RECORD DRAWINGS**  
**(UNDER SEPARATE COVER)**

**CITY OF DILLINGHAM, ALASKA**  
**AERATED LAGOON FACILITY IMPROVEMENTS**

**CONSTRUCTION DRAWINGS**  
**(UNDER SEPARATE COVER)**