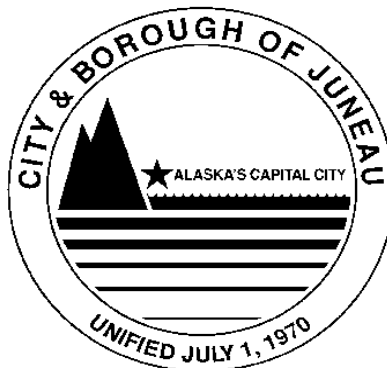


# **SEAWALK – BRIDGE TO GOLD CREEK, PHASE I**

## **VOLUME I OF II**

**Contract No. E16-126**

File No. 1655A



ENGINEERING DEPARTMENT

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**END OF SECTION**

## SECTION 00030 NOTICE INVITING BIDS

**OBTAINING CONTRACT DOCUMENTS.** The Contract Documents are entitled:

**Seawalk – Bridge to Gold Creek, Phase I  
Contract No. E16-126**

The Contract Documents may be obtained at the City & Borough of Juneau (CBJ) Engineering Department, 3rd Floor Marine View Center, upon payment of \$75.00 (non-refundable) for each set of Contract Documents (including Technical Specifications and Drawings) or may be downloaded for free at the CBJ Engineering Department webpage at: [www.juneau.org/engineering](http://www.juneau.org/engineering)

**PRE-BID CONFERENCE.** Prospective Bidders are encouraged to attend a pre-Bid conference to discuss the proposed WORK, which will be conducted by the OWNER, at 10:00 a.m. on December 4, 2015, in the CBJ Engineering Department Conference Room, 3<sup>rd</sup> Floor, Marine View Center. The object of the conference is to acquaint Bidders with the project and bid documents.

**DESCRIPTION OF WORK.** This Project consists of the sitework required for the Bridge to Gold Creek segment of the Downtown Seawalk including the sitework for Bridge Park at the northern terminus of the Seawalk. Bridge Park is located along Gastineau Channel between 8<sup>th</sup> and 9<sup>th</sup> Streets, and the Seawalk segment is located between the park to Gold Creek.

1. The Seawalk sitework includes the installation of approximately 2.7 acres of intertidal fill to provide the shot rock core of an intertidal island, and additional fill for a construction access route. Some surfaces of the island will be protected with 36" minus boulders.
2. Bridge Park sitework includes the installation of approximately 0.6 acres of intertidal fill to provide the base material for a small active recreation zone, a water viewing plaza, and a whale sculpture and water feature.
3. Work at the Bridge Park site will also include the installation of a concrete vault that will provide a foundation for a whale sculpture and the underground piping necessary for future installation of a water feature surrounding the whale sculpture. The sculpture and water feature will be furnished and installed by others, not under this contract.

**COMPLETION OF WORK.** Work is scheduled to commence consistent with CONTRACTOR's proposed schedule during the winter of 2015-16, with the following conditions:

- Work can begin at any time following the CONTRACTOR's compliance with all specified pre-work requirements.
- Concrete for the whale sculpture foundation at Bridge Park shall not be installed before April 1, 2016.
- Site shall be ready to receive the Whale Sculpture July 1, 2016.
- Substantial Completion shall be July 1, 2016.
- Final Completion shall be July 15, 2016.

**DEADLINE FOR BIDS:** Sealed bids must be received by the Purchasing Division **prior to 2:00 p.m., Alaska Time on December 15, 2015**, or such later time as may be announced by addendum at any time prior to the deadline. Bids will be time and date stamped by the Purchasing Division, which will establish the official time of receipt of bids. Bids will be opened immediately thereafter in the Assembly Chambers of the Municipal Building, 155 S. Seward Street, unless otherwise specified.

## SECTION 00030 NOTICE INVITING BIDS

Bid documents delivered in person or by courier service must be delivered to:

**PHYSICAL LOCATION:**

City and Borough of Juneau, Purchasing Division  
105 Municipal Way, Room 300  
Juneau, AK 99801

Bid documents delivered by the U.S. Postal Service must be mailed to:

**MAILING ADDRESS:**

City and Borough of Juneau, Purchasing Division  
155 South Seward Street  
Juneau, AK 99801

**Please affix the label below to outer envelope in the lower left hand corner.**

<b>IMPORTANT NOTICE TO BIDDER</b>		
<b>To submit your Bid:</b>		
1. Print your company name and address on the upper left corner of your envelope.		
2. <b>Complete this label and place it on the lower left corner of your envelope.</b>		
<b>S E A L E D</b>	<b>BID NUMBER:</b> <u><b>E16-126</b></u>	<b>B I D</b>
	<b>SUBJECT:</b> <u><b>SEAWALK – BRIDGE TO GOLD CREEK, PHASE I</b></u>	
	<b>DEADLINE DATE:</b> _____	
	<b>PRIOR TO 2:00PM ALASKA TIME</b>	

**Mailing/delivery times to Alaska may take longer than other areas of the U.S.** Late bids will not be accepted and will be returned.

**SITE OF WORK.** The site of the WORK runs from the Juneau Douglas Bridge along the tidelands to Gold Creek. Future phases to construct a pile supported Seawalk, establishing habitat on the Island and finishing work at Bridge Park. Contract for pile supported Seawalk is expected to have NTP on July 15, 2016.

**BIDDING, CONTRACT, or TECHNICAL QUESTIONS.** All communications relative to this WORK, prior to opening Bids, shall be directed to the following:

Greg Smith, Contract Administrator  
CBJ Engineering Department, 3<sup>rd</sup> Floor, Marine View Center  
Email: greg.smith@juneau.org  
Telephone: (907) 586-0873  
Fax: (907) 586-4530

## SECTION 00030 NOTICE INVITING BIDS

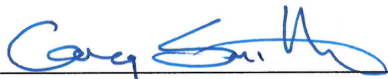
**BID SECURITY.** Each Bid shall be accompanied by a certified or cashier's check or Bid Bond, in the amount of 5% percent of the Bid, payable to the City and Borough of Juneau, Alaska, as a guarantee that the Bidder, if its Bid is accepted, will promptly execute the Agreement. A Bid shall not be considered unless one of the forms of Bidder's security is enclosed with it.

**CONTRACTOR'S LICENSE.** All contractors are required to have a current Alaska Contractor's License, prior to submitting a Bid, and a current Alaska Business License prior to award.

**BID TO REMAIN OPEN.** The Bidder shall guarantee the Bid for a period of 90 Days from the date of Bid opening. Any component of the Bid may be awarded anytime during the 90 Days.

**OWNER'S RIGHTS RESERVED.** The OWNER reserves the right to reject any or all Bids, to waive any informality in a Bid, and to make award to the lowest responsive, responsible Bidder as it may best serve the interests of the OWNER.

**OWNER: City and Borough of Juneau**

By:  Date 11/25/2015  
Greg Smith, Contract Administrator

**END OF SECTION**

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

**1.0 DEFINED TERMS.** Terms used in these Instructions to Bidders and the Notice Inviting Bids, which are defined in the General Conditions, have the meanings assigned to them in the General Conditions. The term "Bidder" means one who submits a Bid directly to the OWNER, as distinct from a sub-bidder, who submits a Bid to a Bidder.

### **2.0 INTERPRETATIONS AND ADDENDA.**

- A. **INTERPRETATIONS.** All questions about the meaning or intent of the Contract Documents are to be directed to the Engineering Contracts Administrator. Interpretations or clarifications considered necessary by the Engineering Contracts Administrator in response to such questions will be issued by Addendum, mailed, faxed, or delivered to all parties recorded by the Engineering Contracts Administrator, or OWNER, as having received the Contract Documents. Questions received less than seven Days prior to the Deadline for Bids may not be answered. Only questions answered by formal written Addendum will be binding. Oral and other interpretations or clarifications will be without legal effect.
- B. **ADDENDA.** Addenda may be issued to modify the Contract Documents as deemed advisable by the OWNER. Addenda may be faxed or, if addendum format warrants, addenda may be posted to the CBJ Engineering Department website. In any event, notification of addendum issuance will be faxed to planholders. Hard copies are available upon request. The OWNER will make all reasonable attempts to ensure that all planholders receive notification of Addenda. However, it is strongly recommended by the OWNER that bidders independently confirm the contents, number, and dates of each Addendum prior to submitting a Bid.

**3.0 FAIR COMPETITION.** More than one Bid from an individual, firm, partnership, corporation, or association under the same or different names will not be considered. If the OWNER believes that any Bidder is interested in more than one Bid for the WORK contemplated, all Bids in which such Bidder is interested will be rejected. If the OWNER believes that collusion exists among the Bidders, all Bids will be rejected.

**4.0 RESPONSIBILITY OF BIDDERS.** Only responsive Bids from responsible Bidders will be considered. A Bid submitted by a Bidder determined to be not responsible may be rejected. The OWNER may find a bidder to be not responsible for any one of the following reasons, but is not limited in its responsibility analysis to the following factors:

- A. Evidence of bid rigging or collusion;
- B. Fraud or dishonesty in the performance of previous contracts;
- C. Record of integrity;
- D. More than one bid for the same work from an individual, firm, or corporation under the same or different name;
- E. Unsatisfactory performance on previous or current contracts;
- F. Failure to pay, or satisfactorily settle, all bills due for labor and material on previous contracts;

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

- G. Uncompleted work that, in the judgment of the OWNER, might hinder or prevent the bidder's prompt completion of additional work, if awarded;
- H. Failure to reimburse the OWNER for monies owed on any previous contracts;
- I. Default under previous contracts;
- J. Failure to comply with any qualification requirements of the OWNER; special standards for responsibility, if applicable, will be specified. These special standards establish minimum standards or experience required for a responsible Bidder on a specific contract;
- K. Engaging in any activity that constitutes a cause for debarment or suspension under the CBJ Procurement Code 53.50 or submitting a bid during a period of debarment;
- L. Lack of skill, ability, financial resources, or equipment required to perform the contract; or
- M. Lack of legal capacity to contract.
- N. Bidders must be registered as required by law and in good standing for all amounts owed to the OWNER per Paragraph 21.0 of this Section.
- O. Failure to submit a complete Subcontractor Report as required in section Section 00360 – Subcontractor Report.

Nothing contained in this section deprives the OWNER of its discretion in determining the lowest responsible bidder. Before a Bid is considered for award, a Bidder may be requested to submit information documenting its ability and competency to perform the WORK, according to general standards of responsibility and any special standards which may apply. It is Bidder's responsibility to submit sufficient, relevant, and adequate information. OWNER will make its determination of responsibility and has no obligation to request clarification or supplementary information.

**5.0 NON-RESPONSIVE BIDS.** Only responsive Bids will be considered. Bids may be considered non-responsive and may be rejected. Some of the reasons a Bid may be rejected for being non-responsive are:

- A. If a Bid is received by the CBJ Purchasing Division after the Deadline for Bids.
- B. If the Bid is on a form other than that furnished by the OWNER, or legible copies thereof; or if the form is altered or any part thereof is detached; or if the Bid is improperly signed.
- C. If there are unauthorized additions, conditional or alternate Bids, or irregularities of any kind which may tend to make the bid incomplete, indefinite, ambiguous as to its meaning, or in conflict with the OWNER's Bid document.
- D. If the Bidder adds any unauthorized conditions, limitations, or provisions reserving the right to accept or reject any award, or to enter into a contract pursuant to an award. This does not exclude a Bid limiting the maximum gross amount of awards acceptable to any one Bidder at any one Bid opening, provided that any selection of awards will be made by the OWNER.

## **SECTION 00100 - INSTRUCTIONS TO BIDDERS**

- E. If the Bid does not contain a Unit Price for each pay item listed, except in the case of authorized alternate pay items.
- F. If the Bidder has not acknowledged receipt of each Addendum.
- G. If the Bidder fails to furnish an acceptable Bid guaranty with the Bid.
- H. If any of the Unit Prices Bid are excessively unbalanced (either above or below the amount of a reasonable Bid) to the potential detriment of the OWNER.
- I. If a Bid modification does not conform to Article 15.0 of this Section.

### **6.0 BIDDER'S EXAMINATION OF CONTRACT DOCUMENTS AND SITE.** It is the responsibility of each Bidder before submitting a Bid:

- A. To examine thoroughly the Contract Documents, and other related data identified in the Bidding documents (including "technical data" referred to below):
  - 1. To visit the site to become familiar with and to satisfy the Bidder as to the general and local conditions that may affect cost, progress, or performance, of the WORK,
  - 2. To consider federal, state and local laws and regulations that may affect cost, progress, or performance of the WORK,
  - 3. To study and carefully correlate the Bidder's observations with the Contract Documents, and other related data; and
  - 4. To notify the ENGINEER of all conflicts, errors, or discrepancies in or between the Contract Documents and such other related data.

### **7.0 REFERENCE IS MADE TO THE SUPPLEMENTARY GENERAL CONDITIONS FOR IDENTIFICATION OF:**

- A. Those reports of explorations and tests of subsurface conditions at the site which have been utilized by the Engineer of Record in the preparation of the Contract Documents. The Bidder may rely upon the accuracy of the technical data contained in such reports, however, the interpretation of such technical data, including any interpolation or extrapolation thereof, together with non-technical data, interpretations, and opinions contained therein or the completeness thereof is the responsibility of the Bidder.
- B. Those Drawings of physical conditions in or relating to existing surface and subsurface conditions (except underground utilities) which are at or contiguous to the site have been utilized by the Engineer of Record in the preparation of the Contract Documents. The Bidder may rely upon the accuracy of the technical data contained in such Drawings, however, the interpretation of such technical data, including any interpolation or extrapolation thereof, together with nontechnical data, interpretations, and opinions contained in such Drawings or the completeness thereof is the responsibility of the Bidder.
- C. Copies of such reports and Drawings will be made available by the OWNER to any Bidder on request if said reports and Drawings are not bound herein. Those reports and Drawings are not part of the Contract Documents, but the technical data contained therein upon which the Bidder is entitled to rely, as provided in Paragraph SGC-4.2 of the Supplementary General Conditions, are incorporated herein by reference.

## **SECTION 00100 - INSTRUCTIONS TO BIDDERS**

- D. Information and data reflected in the Contract Documents with respect to underground utilities at or contiguous to the site is based upon information and data furnished to the OWNER and the Engineer of Record by the owners of such underground utilities or others, and the OWNER does not assume responsibility for the accuracy or completeness thereof unless it is expressly provided otherwise in the Supplementary General Conditions, or in Section 01530 - Protection and Restoration of Existing Facilities of the General Requirements.
- E. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders on subsurface conditions, underground utilities and other physical conditions, and possible changes in the Contract Documents due to differing conditions appear in Paragraphs 4.2, 4.3, and 4.4 of the General Conditions.
- F. Before submitting a Bid, each Bidder will, at Bidder's own expense, make or obtain any additional examinations, investigations, explorations, tests, and studies and obtain any additional information and data which pertain to the physical conditions (surface, subsurface, and underground utilities) at or contiguous to the site or otherwise which may affect cost, progress, or performance of the WORK and which the Bidder deems necessary to determine its Bid for performing the WORK in accordance with the time, price, and other terms and conditions of the Contract Documents.
- G. On request in advance, the OWNER will provide each Bidder access to the site to conduct such explorations and tests as each Bidder deems necessary for submission of a Bid. Bidder shall fill all holes and shall clean up and restore the site to its former condition upon completion of such explorations.
- H. The lands upon which the WORK is to be performed, rights-of-way and easements for access thereto and other lands designated for use by the CONTRACTOR in performing the WORK are identified in the Contract Documents. All additional lands and access thereto required for temporary construction facilities or storage of materials and equipment are to be provided by the CONTRACTOR. Easements for permanent structures or permanent changes in existing structures are to be obtained and paid for by the OWNER unless otherwise provided in the Contract Documents.
- I. The submission of a Bid will constitute an incontrovertible representation by the Bidder that the Bidder has complied with every requirement of Article 6.0, "Bidder's Examination of Contract Documents and Site" herein, that without exception the Bid is premised upon performing the WORK required by the Contract Documents and such means, methods, techniques, sequences, or procedures of construction as may be indicated in or required by the Contract Documents, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the WORK.

### **8.0 BID FORM.**

- A. The Bid shall be made on the Bid Schedule(s) bound herein, or on the yellow Bid packet provided, or on legible and complete copies thereof, and shall contain the following: Sections 00300, 00310, the required Bid Security, and any other documents required in Section 00300 – Bid.
- B. All blanks on the Bid Form and Bid Schedule must be completed in ink or typed.

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

- C. Bids by corporations must be executed in the corporate name by the president, a vice-president (or other corporate officer). The corporate address and state of incorporation must appear below the signature.
- D. Bids by partnerships must be executed in the partnership name and be signed by a managing partner, and the official address of the partnership must appear below the signature.
- E. The Bidder's Bid must be signed. All names must be printed or typed below the signature.
- F. The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid form. Failure to acknowledge Addenda may render Bid non-responsive and may cause its rejection.
- G. The address to which communications regarding the Bid are to be directed must be shown.

**9.0 QUANTITIES OF WORK.** The quantities of WORK, or material, stated in Unit Price items of the Bid are supplied only to give an indication of the general scope of the WORK; the OWNER does not expressly or by implication agree that the actual amount of WORK, or material, will correspond therewith, and reserves the right after award to increase or decrease the amount of any Unit Price item of the WORK by an amount up to and including 25 percent of any Bid item, without a change in the Unit Price, and shall include the right to delete any Bid item in its entirety, or to add additional Bid items up to and including an aggregate total amount not to exceed 25 percent of the Contract Price (see Section 00700 - General Conditions, Article 10 Changes In the WORK).

**10.0 SUBSTITUTE OR "OR-EQUAL" ITEMS.** The procedure for the submittal of substitute or "or-equal" products is specified in Section 01300 – Contractor Submittals.

**11.0 SUBMISSION OF BIDS.** The Bid shall be delivered by the time and to the place stipulated in Section 00030 - Notice Inviting Bids. It is the Bidder's sole responsibility to see that its Bid is received in proper time. Oral, telegraphic, emailed, or faxed Bids will not be considered. The envelope enclosing the sealed Bids shall be plainly marked in the upper left-hand corner with the name and address of the Bidder and shall also include the label included in Section 00030 – Notice Inviting Bids. The Bid Security shall be enclosed in the same envelope with the Bid

**12.0 BID SECURITY, BONDS, AND INSURANCE.** Each Bid shall be accompanied by a certified, or cashier's check, or approved Bid Bond in an amount of at least 5 percent of the total Bid price. The "total Bid price" is the amount of the Base Bid, plus the amount of alternate Bids, if any, which total to the maximum amount for which the CONTRACT could be awarded. Said check or Bond shall be made payable to the OWNER and shall be given as a guarantee that the Bidder, if offered the WORK, will enter into an Agreement with the OWNER, and will furnish the necessary insurance certificates, Payment Bond, and Performance Bond; each of said Bonds, if required, and insurance amounts shall be as stated in the Supplementary General Conditions. In case of refusal or failure to enter into said Agreement, the check or Bid Bond, as the case may be, may be forfeited to the OWNER. If the Bidder elects to furnish a Bid Bond as its Bid security, the Bidder shall use the Bid Bond form bound herein, or one conforming substantially to it in form. Bid Bonds must be accompanied by a legible Power of Attorney.

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

**13.0 RETURN OF BID SECURITY.** The OWNER will return all Bid security checks (certified or cashier's) accompanying such of the Bids as are not considered in making the award. All other Bid securities will be held until the Agreement has been executed. Following execution of the Agreement, all other Bid security checks will be returned to the respective Bidders whose Bids they accompanied and Bid security bonds will be appropriately discarded.

**14.0 DISCREPANCIES IN BIDS.** In the event there is more than one Pay Item in a Bid Schedule, the Bidder shall furnish a price for all Pay Items in the schedule, and failure to do so may render the Bid non-responsive and cause its rejection. In the event there are Unit Price Pay Items in a Bid Schedule and the "amount" indicated for a Unit Price Bid Item does not equal the product of the Unit Price and quantity, the Unit Price shall govern and the amount will be corrected accordingly, and the Bidder shall be bound by said correction. In the event there is more than one Pay Item in a Bid Schedule and the total indicated for the schedule does not agree with the sum of the prices Bid on the individual items, the prices Bid on the individual items shall govern and the total for the schedule will be corrected accordingly, and the Bidder shall be bound by said correction.

### **15.0 BID MODIFICATIONS AND UNAUTHORIZED ALTERNATIVE BIDS.**

- A. Any bidder may deliver a modification to a bid in person, by mail or fax (907-586-4561), provided that such modification is received by the Purchasing Division no later than the deadline for bids. Modifications will be time and date stamped by the Purchasing Division, which will establish the official time of receipt of the modification. The modification must not reveal the bid price but should be in the form of an addition or subtraction or other modification so that the final prices will not be known until the sealed bid is opened.

The Bid modifications shall be provided on the **Bid Modification Form** located at the end of this Section. Submittal of any other form by the vendor may deem the modification unacceptable by the OWNER. **A mail or fax modification should not reveal the Bid price but should provide the addition or subtraction or other modification so that the final prices will not be known by the City and Borough until the sealed Bid is opened.** Submitted Modification forms shall include the modification to the unit price or lump sum amount of each pay item modified.

**FAX DISCLAIMER:** It is the responsibility of the bidder to submit modifications in a timely manner. Bidders' use of a fax machine to modify their bid shall be at bidders' sole risk. The Purchasing Division will attempt to keep the fax machine in good working order but will not be responsible for bid modifications that are late due to mechanical failure, a busy fax machine, or any other cause arising from bidder's use of a fax machine, even if bidder submits a transmission report or provides other confirmation indicating that the bidder transmitted a bid modification prior to the deadline. The City will not be responsible for its failure to receive the modification whether such failure is caused by equipment or human error, or otherwise. Bidders are therefore strongly encouraged to confirm receipt of their bid modification with the Purchasing Division (907-586-5258) prior to deadline.

- B. Conditioned bids, limitations, or provisos attached to the Bid or bid modification will render it unauthorized and cause its rejection as being non-responsive. The completed Bid forms shall be without interlineations, alterations, or erasures in the printed text. All changes shall be initialed by the person signing the Bid. Alternative Bids will not be considered unless called for.

## **SECTION 00100 - INSTRUCTIONS TO BIDDERS**

**16.0 WITHDRAWAL OF BID.** Prior to the Deadline for Bids, the Bid may be withdrawn by the Bidder by means of a written request, signed by the Bidder or its properly authorized representative. Such written request must be delivered to the place stipulated in the Notice Inviting Bids for receipt of Bids.

### **17.0 AWARD OF CONTRACT.**

- A. Award of a contract, if it is awarded, will be on the basis of materials and equipment described in the Drawings or specified in the Technical Specifications and will be made to the lowest responsive, responsible Bidder whose Bid complies with all the requirements prescribed. Unless otherwise specified, any such award will be made within the period stated in the Notice Inviting Bids that the Bids are to remain open. Unless otherwise indicated, a single award will be made for all the Bid items in an individual Bid Schedule.
- B. If the OWNER has elected to advertise this Project with a Base Bid and Alternates, the OWNER may elect to award the contract for the Base Bid, or the Base Bid in combination with one or more Alternates selected by the OWNER. In either case, award shall be made to the responsive, responsible bidder offering the lowest total Bid for the WORK to be awarded.

### **18.0 EXECUTION OF AGREEMENT.**

- A. All Bids of value greater than \$1,000,000 must be approved by the CBJ Assembly. After the CBJ Assembly has approved the award and after the Bid protest period, the OWNER will issue a Notice of Intent to Award to the approved Bidder. The Bidder to whom award is made shall execute a written Agreement with the OWNER on the Agreement form, Section 00500, collect insurance, and shall furnish all certificates and Bonds required by the Contract Documents within 10 Days (calendar) from the date of the Notice of Intent to Award letter.
- B. Failure or refusal to enter into the Agreement as herein provided or to conform to any of the stipulated requirements in connection therewith shall be just cause for annulment of the award and forfeiture of the Bid security. If the lowest responsive, responsible Bidder refuses or fails to execute the Agreement, the OWNER may award the contract to the second lowest responsive, responsible Bidder. If the second lowest responsive, responsible Bidder refuses or fails to execute the Agreement, the OWNER may award the contract to the third lowest responsive, responsible Bidder. On the failure or refusal of such second or third lowest Bidder to execute the Agreement, each such Bidder's Bid securities shall be likewise forfeited to the OWNER.

**19.0 LIQUIDATED DAMAGES.** Provisions for liquidated damages if any, are set forth in Section 00500 - Agreement.

### **20.0 FILING A PROTEST.**

- A. A Bidder may protest the proposed award of a competitive sealed Bid by the City and Borough of Juneau. The protest shall be executed in accordance with CBJ Ordinance 53.50.062 PROTESTS and CBJ Ordinance 53.50.080 ADMINISTRATION OF PROTEST. The entire text of the CBJ Purchasing Ordinance can be accessed at the CBJ website, <http://www.juneau.org/law/code/code.php>, or call the CBJ Purchasing Division at

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

(907) 586-5258 for a copy of the ordinance.

B. Late protests shall not be considered by the CBJ Purchasing Officer.

**21.0 CONTRACTOR'S GOOD STANDING WITH CBJ FINANCE DEPARTMENT:** Contractors must be in good standing with the CBJ prior to award, and prior to any contract renewals, and in any event no later than ***seven business days*** following notification by the CBJ of intent to award. **Good standing** means: all amounts owed to the CBJ are current and the Contractor is not delinquent with respect to any taxes, fees, assessment, or other monies due and owed the CBJ, or a Confession of Judgment has been executed and the Contractor is in compliance with the terms of any stipulation associated with the Confession of Judgment, including being current as to any installment payments due; and Contractor is current in all CBJ reporting obligations (such as sales tax registration and reporting and business personal property declarations). Failure to meet these requirements may be cause for rejection of your bid. To determine if your business is in good standing, or for further information, contact the CBJ Finance Department's Sales Tax Division at (907) 586-5265 for sales tax issues, Assessor's Office at (907)586-0930 for business personal property issues, or Collections Division at (907) 586-5268 for all other accounts.

**22.0 PERMITS AND LICENSES.** The CONTRACTOR is responsible for all WORK associated with meeting any local, state, and/or federal permit and licensing requirements.

## SECTION 00100 - INSTRUCTIONS TO BIDDERS

CITY AND BOROUGH OF JUNEAU  
PURCHASING DIVISION  
FAX NO. 907-586-4561

### BID MODIFICATION FORM

Modification Number: \_\_\_\_\_

Modification Page \_\_\_\_ of \_\_\_\_

Note: All modifications shall be made to the original bid amount(s). If more than one Modification form is submitted by any one bidder, changes from all Modification forms submitted will be combined and applied to the original bid. Changes to the modified Bid amounts will be calculated by the OWNER. Bidder may use multiple modification pages if required.

PAY ITEM NO.	PAY ITEM DESCRIPTION	MODIFICATIONS TO UNIT PRICE OR LUMP SUM ( <i>indicate +/-</i> )

Total Increase or Decrease: \$ \_\_\_\_\_

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

3.

\_\_\_\_\_  
Responsible Party Signature

\_\_\_\_\_  
Printed Name (must be an authorized signatory for Bidding Firm)

END OF SECTION

## SECTION 00300 - BID

### BID TO: THE CITY AND BOROUGH OF JUNEAU

1. The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with the OWNER on the form included in the Contract Documents (as defined in Article 7 of Section 00500 - Agreement) to perform the WORK as specified or indicated in said Contract Documents entitled

#### Seawalk – Bridge to Gold Creek, Phase I Contract No. E16-176

2. Bidder accepts all of the terms and conditions of the Contract Documents, including without limitation those in the “Notice Inviting Bids” and “Instructions to Bidders,” dealing with the disposition of the Bid Security.
3. This Bid will remain open for the period stated in the “Notice Inviting Bids” unless otherwise required by law. Bidder will enter into an Agreement within the time and in the manner required in the “Notice Inviting Bids” and the “Instructions to Bidders,” and will furnish insurance certificates, Payment Bond, Performance Bond, and any other documents as may be required by the Contract Documents.
4. Bidder has familiarized itself with the nature and extent of the Contract Documents, WORK, site, locality where the WORK is to be performed, the legal requirements (federal, state and local laws, ordinances, rules, and regulations), and the conditions affecting cost, progress or performance of the WORK and has made such independent investigations as Bidder deems necessary.
5. This Bid is genuine and not made in the interest of or on behalf of any undisclosed person, firm or corporation and is not submitted in conformity with any agreement or rules of any group, association, organization or corporation; Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid; Bidder has not solicited or induced any person, firm or corporation to refrain from bidding; and Bidder has not sought by collusion to obtain for itself any advantage over any other Bidder or over OWNER.
6. To all the foregoing, and including all Bid Schedule and information required of Bidder contained in this Bid Form, said Bidder further agrees to complete the WORK required under the Contract Documents within the Contract Time stipulated in said Contract Documents, and to accept in full payment therefore the Contract Price based on the total bid price(s) named in the aforementioned Bid Schedule.
7. Bidder has examined copies of all the Contract Documents including the following Addenda (receipt of all of which is hereby acknowledged by the Undersigned):

Addenda No.	Date Issued

Addenda No.	Date Issued

**Give number and date of each Addenda above. Failure to acknowledge receipt of all Addenda may cause the Bid to be non-responsive and may cause its rejection.**

## SECTION 00300 - BID

8. The Bidder has read this Bid and agrees to the conditions as stated herein by signing its signature in the space provided below.

Dated: _____	Bidder: _____ (Company Name)
Alaska CONTRACTOR's Business License No: _____	By: _____ (Signature)
Alaska CONTRACTOR's License No: _____	Printed Name: _____ Title: _____
Telephone No: _____	Address: _____ (Street or P.O. Box)
Fax No: _____	_____
E-mail: _____	(City, State, Zip)

9. TO BE CONSIDERED, ALL BIDDERS MUST COMPLETE AND INCLUDE THE FOLLOWING AT THE TIME OF THE DEADLINE FOR BIDS:

- Bid, Section 00300 (includes Addenda receipt statement)
- Completed Bid Schedule, Section 00310
- Bid Security (Bid Bond, Section 00320, or by a certified or cashier's check as stipulated in the Notice Inviting Bids, Section 00030)

10. The apparent low Bidder is required to complete and submit the following documents by 4:30 p.m. on the **fifth business day** following the date of the Posting Notice.

- Subcontractor Report, Section 00360

The apparent low Bidder who fails to submit a completed Subcontractor Report within the time specified in Section 00360 – Subcontractor Report may be found to be not a responsible Bidder and may be required to forfeit the Bid security. The OWNER may then consider the next lowest Bidder for award of the contract.

11. The successful Bidder will be required to submit, **within ten Days (calendar)** after the date of the “Notice of Intent to Award” letter, the following executed documents:

- Agreement Forms, Section 00500
- Performance Bond, Section 00610
- Payment Bond, Section 00620
- Certificates of Insurance, (CONTRACTOR) Section 00700 and Section 00800

**END OF SECTION**

## SECTION 00310 - BID SCHEDULE

PAY ITEM NO.	PAY ITEM DESCRIPTION	PAY UNIT	APPROX. QUANTITY	UNIT PRICE		AMOUNT	
				DOLLARS	CENTS	DOLLARS	CENTS
1505.1	Mobilization	Lump Sum	All Req'd	Lump	Sum		
1550.1	Traffic Control	Lump Sum	All Req'd	Lump	Sum		
1570.1	Erosion and Sediment Control	Lump Sum	All Req'd	Lump	Sum		
2201.1	Clearing and Grubbing	SY	700				
2201.2	Transplant Alkali Grass	SF	5,400				
2202.1	Usable Excavation	CY	270				
2202.2	Unusable Excavation	CY	600				
2202.3	2-Inch Minus Shot Rock Borrow	Ton	1,220				
2202.4	8-Inch Minus Shot Rock Borrow	Ton	16,900				
2202.5	18-Inch Minus Shot Rock Borrow	Ton	59,200				
2202.6	Mining Area Restoration & Road Cleaning Guarantee	Contingent Sum	All Req'd	Contingent	Sum	\$10,000	00
2202.7	Individual Mining Plan	Lump Sum	All Req'd	Lump	Sum		
2202.8	36-Inch Minus Boulders, Natural-origin	Ton	2,000				
2202.9	36-Inch Minus Boulders, Quarry-origin	Ton	7,500				
2204.2	Base Course, Grading D-1	Ton	200				
2205.1	Class IV Rip Rap	CY	2,260				
2501.1	12-Inch Pipe Culvert	LF	190				
2502.1	Storm Drain Manhole, Type I	EA	1				
2502.2	Catch Basin, Type III	EA	1				
2601.1	Site Piping for Whale Sculpture	Lump Sum	All Req'd	Lump	Sum		
2603.1	Fire Hydrant Assembly	EA	1				
2605.1	1-Inch Water Services	Lump Sum	All Req'd	Lump	Sum		

COMPANY NAME: \_\_\_\_\_

## SECTION 00310 - BID SCHEDULE

PAY ITEM NO.	PAY ITEM DESCRIPTION	PAY UNIT	APPROX. QUANTITY	UNIT PRICE		AMOUNT	
				DOLLARS	CENTS	DOLLARS	CENTS
2702.1	Construction Surveying	Lump Sum	All Req'd	Lump	Sum		
2714.1	Stabilization Fabric	SY	2,000				
2714.2	Geogrid	SY	900				
2716.1	Storm Culvert Removal	Lump Sum	All Req'd	Lump	Sum		
2717.1	Storm Structure Removal	Lump Sum	All Req'd	Lump	Sum		
2718.1	Project Sign Assembly	Lump Sum	All Req'd	Lump	Sum		
2806.1	Remove Existing Asphalt Surfacing	SY	364				
3300.1	Concrete Foundation for the Whale Sculpture	Lump Sum	All Req'd	Lump	Sum		

**TOTAL BASE BID** \_\_\_\_\_

**COMPANY NAME:** \_\_\_\_\_

**SECTION 00320 - BID BOND**

KNOW ALL PERSONS BY THESE PRESENTS, that \_\_\_\_\_  
\_\_\_\_\_ as Principal, and \_\_\_\_\_  
as Surety, are held and firmly bound unto **THE CITY AND BOROUGH OF JUNEAU** hereinafter called  
"OWNER," in the sum of \_\_\_\_\_  
\_\_\_\_\_ dollars, (not less than five percent of the total amount of the Bid) for the  
payment of which sum, well and truly to be 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 the WORK required under  
the Bid Schedule of the OWNER's Contract Documents entitled.

**SEAWALK – BRIDGE TO GOLD CREEK, PHASE I**  
**Contract No. E16-126**

NOW THEREFORE, if said Principal is awarded a contract by said OWNER and, within the time and  
in the manner required in the "Notice Inviting Bids" and the "Instructions to Bidders" 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. 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.

SIGNED AND SEALED, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_

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

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

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

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

**END OF SECTION**

## SECTION 00360 - SUBCONTRACTOR REPORT

### LIST OF SUBCONTRACTORS (AS 36.30.115)

The apparent low Bidder must submit a list of Subcontractors that the Bidder proposes to use in the performance of this contract *on the fifth business day* following the Posting Notice of Bids. If the fifth day falls on a weekend or holiday, the report is due by close of business on the next business Day following the weekend or holiday. The Subcontractor Report list must include each Subcontractor's name, address, location, evidence of valid Alaska Business License, and valid Alaska Contractor's Registration under AS 08.18. *If no Subcontractors are to be utilized in the performance of the WORK, write in ink or type "NONE" on line (1) below.*

<u>SUBCONTRACTOR</u>	<sup>1</sup> <u>AK Contractor License No.</u>	<sup>1</sup> <u>Contact Name</u>	<u>Type of</u>	<u>Contract</u>	<input type="checkbox"/> if
<u>ADDRESS</u>	<sup>2</sup> <u>AK Business License No.</u>	<sup>2</sup> <u>Phone No.</u>	<u>Work</u>	<u>Amount</u>	<u>DBE</u>
1. _____ _____ _____	<sup>1</sup> _____  <sup>2</sup> _____	_____  _____	_____  _____	\$ _____	<input type="checkbox"/>
2. _____ _____ _____	<sup>1</sup> _____  <sup>2</sup> _____	_____  _____	_____  _____	\$ _____	<input type="checkbox"/>
3. _____ _____ _____	<sup>1</sup> _____  <sup>2</sup> _____	_____  _____	_____  _____	\$ _____	<input type="checkbox"/>
4. _____ _____ _____	<sup>1</sup> _____  <sup>2</sup> _____	_____  _____	_____  _____	\$ _____	<input type="checkbox"/>

I certify that the above listed Alaska Business License(s) and CONTRACTOR Registration(s), if applicable, were valid at the time Bids were opened for this Project.

\_\_\_\_\_  
CONTRACTOR, Authorized Signature

\_\_\_\_\_  
CONTRACTOR, Printed Name

\_\_\_\_\_  
COMPANY

## **SECTION 00360 - SUBCONTRACTOR REPORT**

- A. A Bidder may replace a listed Subcontractor if the Subcontractor:
1. fails to comply with AS 08.18;
  2. files for bankruptcy or becomes insolvent;
  3. fails to execute a contract with the Bidder involving performance of the WORK for which the Subcontractor was listed and the Bidder acted in good faith;
  4. fails to obtain bonding;
  5. fails to obtain insurance acceptable to the OWNER;
  6. fails to perform the contract with the Bidder involving work for which the Subcontractor was listed;
  7. must be substituted in order for the CONTRACTOR to satisfy required state and federal affirmative action requirements;
  8. refuses to agree or abide with the Bidder's labor agreement; or
  9. is determined by the OWNER not to be responsible.
  10. is not in "Good Standing" with the OWNER as required in Article 21.0 in Section 00100 – Instructions to Bidders.
- B. If a Bidder fails to list a Subcontractor or lists more than one Subcontractor for the same portion of WORK, the Bidder shall be considered to have agreed to perform that portion of WORK without the use of a Subcontractor and to have represented the Bidder to be qualified to perform that WORK.
- C. A Bidder who attempts to circumvent the requirements of this section by listing as a Subcontractor another contractor who, in turn, sublets the majority of the WORK required under the contract violates this section.
- D. If a contract is awarded to a Bidder who violates this section, the OWNER may:
1. cancel the contract; or
  2. after notice and a hearing, assess a penalty on the Bidder in an amount that does not exceed 10 percent of the value of the subcontract at issue.
- E. On the Subcontractor Report, the apparent low Bidder must list any Subcontractors anticipated to perform WORK with a value of greater than one-half of one percent of the intended award amount, or \$2,000, whichever is less.
- F. An apparent low Bidder who fails to submit a completed Subcontractor Report within the time specified in this section may be found to be not a responsible Bidder and may be required to forfeit the Bid security. The OWNER will then consider the next lowest Bidder for award of the contract.

**END OF SECTION**

## SECTION 00500 - AGREEMENT

THIS AGREEMENT is between THE CITY AND BOROUGH OF JUNEAU (hereinafter called OWNER) and \_\_\_\_\_ (hereinafter called CONTRACTOR) OWNER and CONTRACTOR, in consideration of the mutual covenants hereinafter set forth, agree as follows:

### ARTICLE 1. WORK.

CONTRACTOR shall complete the WORK as specified or as indicated under the Bid Schedule of the OWNER's Bid Documents entitled **Contract No. DH16-001 Douglas Harbor Renovation.**

The WORK is generally described as follows: Sitework required for the Bridge to Gold Creek segment of the Downtown Seawalk including the sitework for Bridge Park at the northern terminus of the Seawalk. Bridge Park is located along Gastineau Channel between 8<sup>th</sup> and 9<sup>th</sup> Streets, and the Seawalk segment is located between the park to Gold Creek, and other miscellaneous WORK.

1. The Seawalk sitework includes the installation of approximately 2.7 acres of intertidal fill to provide the shot rock core of an intertidal island, and additional fill for a construction access route. Some surfaces of the island will be protected with 36" minus boulders.
2. Bridge Park sitework includes the installation of approximately 0.6 acres of intertidal fill to provide the base material for a small active recreation zone, a water viewing plaza, and a whale sculpture and water feature.
3. Work at the Bridge Park site will also include the installation of a concrete vault that will provide a foundation for a whale sculpture and the underground piping necessary for future installation of a water feature surrounding the whale sculpture. The sculpture and water feature will be furnished and installed by others, not under this contract.

The WORK to be paid under this contract shall include the following: Total Bid as shown in Section 00310 - Bid Schedule.

### ARTICLE 2. CONTRACT COMPLETION TIME.

Work is scheduled to commence consistent with CONTRACTOR's proposed schedule during the winter of 2015-16, with the following conditions:

- Work can begin at any time following the CONTRACTOR's compliance with all specified pre-work requirements.
- Concrete for the whale sculpture foundation at Bridge Park shall not be installed before April 1, 2016.
- Site shall be ready to receive the Whale Sculpture July 1, 2016.
- Substantial Completion shall be July 1, 2016.
- Final Completion shall be July 15, 2016.

### ARTICLE 3. DATE OF AGREEMENT

The date of this Agreement will be the date of the last signature on page three of this section.

### ARTICLE 4. LIQUIDATED DAMAGES.

OWNER and the CONTRACTOR recognize that time is of the essence of this Agreement and that the OWNER will suffer financial loss if the WORK is not completed within the time specified in Article 2 herein, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. They also recognize the delays, expense, and difficulties involved in proving in a legal proceeding the actual damages suffered by the OWNER if the WORK is not completed on time. Accordingly, instead of requiring any such

## SECTION 00500 - AGREEMENT

proof, the OWNER and the CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) the CONTRACTOR shall pay the OWNER \$500 for each Day that expires after the completion time specified in Article 2 herein. The amount of liquidated damages specified above is agreed to be a reasonable estimate based on all facts known as of the date of this Agreement.

### ARTICLE 5. CONTRACT PRICE.

OWNER shall pay CONTRACTOR for completion of the WORK in accordance with the Contract Documents in the amount set forth in the Bid Schedule. The CONTRACTOR agrees to accept as full and complete payment for all WORK to be done in this contract for: **Contract No. DH16-001 Douglas Harbor Renovation**, those Unit Price amounts as set forth in the Bid Schedule in the Contract Documents for this Project.

The total amount of this contract shall be \_\_\_\_\_ (\$ \_\_\_\_\_), except as adjusted in accordance with the provisions of the Bid Documents.

### ARTICLE 6. PAYMENT PROCEDURES.

CONTRACTOR shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by the ENGINEER as provided in the General Conditions.

Progress payments will be paid in full in accordance with Article 14 of the General Conditions until ninety (90) percent of the Contract Price has been paid. The remaining ten (10) percent of the Contract Price may be retained, in accordance with applicable Alaska State Statutes, until final inspection, completion, and acceptance of the Project by the OWNER.

### ARTICLE 7. CONTRACT DOCUMENTS.

The Contract Documents which comprise the entire Agreement between OWNER and CONTRACTOR concerning the WORK consist of this Agreement (pages 00500-1 to 00500-6, inclusive) and the following sections of the Contract Documents:

- Table of Contents (pages 00005-1 to 00005-2, inclusive)
- Notice Inviting Bids (pages 00030-1 to 00030-2, inclusive).
- Instructions to Bidders (pages 00100-1 to 00100-9, inclusive).
- Bid (pages 00300-1 to 00300-2, inclusive).
- Bid Schedule (pages 00310-1, inclusive).
- Bid Bond (page 00320-1, inclusive) or Bid Security.
- Subcontractor Report (pages 00360-1 to 00360-2, inclusive).
- Performance Bond (pages 00610-1 to 00610-2, inclusive).
- Payment Bond (pages 00620-1 to 00620-2, inclusive).
- Insurance Certificate(s).
- General Conditions (pages 00700-1 to 00700-48, inclusive).
- Supplementary General Conditions (pages 00800-1 to 00800-5, inclusive).
- Alaska Labor Standards, Reporting, and Prevailing Wage Determination (page 00830-1).
- Permits, (page 00852-1).
- Standard Details (page 00853-1).
- Special Provisions (pages 1 to 58 inclusive)

## **SECTION 00500 - AGREEMENT**

- Standard Specifications for Civil Engineering Projects and Subdivision Improvements  
December 2003 with current Errata Sheets.
- Drawings consisting of 28 sheets, as listed in the Table of Contents.
- Addenda numbers \_\_\_\_ to \_\_\_\_, inclusive.
- Change Orders which may be delivered or issued after the Date of the Agreement and which are not attached hereto.

There are no Contract Documents other than those listed in this Article 7. The Contract Documents may only be amended by Change Order as provided in Paragraph 3.3 of the General Conditions.

### **ARTICLE 8. MISCELLANEOUS.**

Terms used in this Agreement which are defined in Article 1 of the General Conditions will have the meanings indicated in the General Conditions.

No assignment by a party hereto of any rights under or interests in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation monies that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law), and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under the Contract Documents.

OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents. This Agreement shall be governed by the laws of the State of Alaska. Jurisdiction shall be in the State of Alaska, First Judicial District.

**SECTION 00500 - AGREEMENT**

IN WITNESS WHEREOF, OWNER and CONTRACTOR have caused this Agreement to be executed on the date listed below by OWNER.

**OWNER:**

**CONTRACTOR:**

\_\_\_\_\_  
City and Borough of Juneau

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

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Signature)

By: Kimberly A. Kiefer, City & Borough Manager  
(Printed Name)

By: \_\_\_\_\_  
(Printed Name, Authority or Title)

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

CONTRACTOR Signature Date: \_\_\_\_\_

OWNER's address for giving notices:

CONTRACTOR's address for giving notices:

\_\_\_\_\_  
155 South Seward Street

\_\_\_\_\_

\_\_\_\_\_  
Juneau, Alaska 99801

\_\_\_\_\_

\_\_\_\_\_  
907-586-0873      907-586-4530  
(Telephone)      (Fax)

\_\_\_\_\_  
(Telephone)      (Fax)

\_\_\_\_\_  
(E-mail address)

Contractor License No. \_\_\_\_\_

SECTION 00500 - AGREEMENT

CERTIFICATE  
(if Corporation)

STATE OF                    )  
                                  ) SS:  
COUNTY OF                )

I HEREBY CERTIFY that a meeting of the Board of Directors of the  
\_\_\_\_\_ a corporation existing under the laws of  
the State of \_\_\_\_\_, held on \_\_\_\_\_, 20\_\_\_\_, the following resolution  
was duly passed and adopted:

“RESOLVED, that \_\_\_\_\_, as \_\_\_\_\_ President of  
the Corporation, be and is hereby authorized to **execute the Agreement** with the CITY AND  
BOROUGH OF JUNEAU and this corporation and that the execution thereof, attested by the  
Secretary of the Corporation, and with the Corporate Seal affixed, shall be the official act and deed of  
this Corporation.”

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the official seal of the  
corporation this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Secretary

(SEAL)

SECTION 00500 - AGREEMENT

CERTIFICATE  
(if Partnership)

STATE OF                    )  
                                  ) SS:  
COUNTY OF                )

I HEREBY CERTIFY that a meeting of the Partners of the  
\_\_\_\_\_ a partnership existing under the laws of the State  
of \_\_\_\_\_, held on \_\_\_\_\_, 20\_\_\_\_, the following resolution was duly  
passed and adopted:

"RESOLVED, that \_\_\_\_\_, as \_\_\_\_\_ of the Partnership, be and is  
hereby authorized to **execute the Agreement** with the CITY AND BOROUGH OF JUNEAU and this  
partnership and that the execution thereof, attested by the \_\_\_\_\_ shall be the  
official act and deed of this Partnership."

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_\_\_, day of \_\_\_\_\_,  
20\_\_\_\_\_.

\_\_\_\_\_  
Secretary

(SEAL)

SECTION 00500 - AGREEMENT

CERTIFICATE  
(if Joint Venture)

STATE OF            )  
                          ) SS:  
COUNTY OF    )

I HEREBY CERTIFY that a meeting of the Principals of the  
\_\_\_\_\_ a joint venture existing under the laws of the  
State of \_\_\_\_\_, held on \_\_\_\_\_, 20\_\_\_\_, the following resolution was duly passed and  
adopted:

"RESOLVED, that \_\_\_\_\_, as \_\_\_\_\_ of the Joint  
Venture, be and is hereby authorized to **execute the Agreement** with the CITY AND BOROUGH OF  
JUNEAU and this joint venture and that the execution thereof, attested by the  
\_\_\_\_\_ shall be the official act and deed of this Joint Venture."

I further certify that said resolution is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my hand this \_\_\_\_\_, day of  
\_\_\_\_\_, 20\_\_\_\_\_.

\_\_\_\_\_  
Secretary

(SEAL)

END OF SECTION

## SECTION 00610 - PERFORMANCE BOND

KNOW ALL PERSONS BY THESE PRESENTS: That we \_\_\_\_\_  
(Name of Contractor)  
\_\_\_\_\_ a \_\_\_\_\_  
(Corporation, Partnership, Individual)  
hereinafter called "Principal" and \_\_\_\_\_  
(Surety)  
of \_\_\_\_\_, State of \_\_\_\_\_ hereinafter called the "Surety," are held and  
firmly bound to the CITY AND BOROUGH of JUNEAU, ALASKA hereinafter called "OWNER,"  
(Owner) (City and State)  
for the penal sum of \_\_\_\_\_  
\_\_\_\_\_ dollars (\$\_\_\_\_\_) in lawful money of the  
United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors,  
administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the CONTRACTOR has entered  
into a certain contract with the OWNER, the effective date of which is (CBJ Contracts Office to fill in effective  
date) \_\_\_\_\_, a copy of which is hereto attached and made a part hereof for the  
construction of:

### **Seawalk – Bridge to Gold Creek, Phase I CBJ Contract No. E16-126**

NOW, THEREFORE, if the Principal shall 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 Principal shall abridge  
the right of any beneficiary hereunder, whose claim may be unsatisfied.

**SECTION 00610 - PERFORMANCE BOND**

**Seawalk – Bridge to Gold Creek, Phase I  
CBJ Contract No. E16-126**

IN WITNESS WHEREOF, this instrument is issued in two (2) identical counterparts, each one of which shall be deemed an original.

**CONTRACTOR:**

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

\_\_\_\_\_  
(Printed Name)

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

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

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

**SURETY:**

By: \_\_\_\_\_  
(Signature of Attorney-in-Fact)

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

\_\_\_\_\_  
(Printed Name)

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

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

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

**(Affix SURETY'S SEAL)**

**NOTE: If CONTRACTOR is Partnership, all Partners must execute bond.**

**END OF SECTION**

## SECTION 00620 - PAYMENT BOND

KNOW ALL PERSONS BY THESE PRESENTS: That we \_\_\_\_\_  
(Name of Contractor)

\_\_\_\_\_ a \_\_\_\_\_  
(Corporation, Partnership, Individual)

hereinafter called "Principal" and \_\_\_\_\_  
(Surety)

of \_\_\_\_\_, State of \_\_\_\_\_ hereinafter called the "Surety," are held and  
firmly bound to the CITY AND BOROUGH of JUNEAU, ALASKA hereinafter called "OWNER,"  
(Owner) (City and State)

for the penal sum of \_\_\_\_\_

\_\_\_\_\_ dollars (\$\_\_\_\_\_) in lawful money of the  
United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors,  
administrators and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION is such that whereas, the CONTRACTOR has entered  
into a certain contract with the OWNER, the effective date of which is (CBJ Contracts Office to fill in effective  
date) \_\_\_\_\_, a copy of which is hereto attached and made a part hereof for the  
construction of:

### **Seawalk – Bridge to Gold Creek, Phase I CBJ Contract No. E16-126**

NOW, THEREFORE, if the Principal shall promptly make payment to all persons, firms,  
Subcontractors, and corporations furnishing materials for, or performing labor in the prosecution of the WORK  
provided for in such contract, and any authorized extension or modification thereof, including all amounts due  
for materials, lubricants, oil, gasoline, coal and coke, repairs on machinery, equipment and tools, consumed or  
used in connection with the construction of such WORK, and all insurance premiums on said work, and for all  
labor performed in such WORK, whether by Subcontractor or otherwise, 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 Principal shall abridge  
the right of any beneficiary hereunder, whose claim may be unsatisfied.

**SECTION 00620 - PAYMENT BOND**

**Seawalk – Bridge to Gold Creek, Phase I  
CBJ Contract No. E16-126**

IN WITNESS WHEREOF, this instrument is issued in two (2) identical counterparts, each one of which shall be deemed an original.

**CONTRACTOR:**

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

\_\_\_\_\_  
(Printed Name)

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

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

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

**SURETY:**

By: \_\_\_\_\_  
(Signature of Attorney-in-Fact)

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

\_\_\_\_\_  
(Printed Name)

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

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

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

**(Affix SURETY'S SEAL)**

**NOTE: If CONTRACTOR is Partnership, all Partners must execute bond.**

**END OF SECTION**

## SECTION 00700 - GENERAL CONDITIONS

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## **SECTION 00700 - GENERAL CONDITIONS**

### **ARTICLE 1 DEFINITIONS**

Wherever used in these General Conditions or in the Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof. Where an entire word is capitalized in the definitions and is found not capitalized in the Contract Documents it has the ordinary dictionary definition.

Addenda - Written or graphic instruments issued prior to the opening of Bids which make additions, deletions, or revisions to the Contract Documents.

Agreement - The written contract between the OWNER and the CONTRACTOR covering the WORK to be performed; other documents are attached to the Agreement and made a part thereof as provided therein.

Application for Payment - The form furnished by the ENGINEER which is to be used by the CONTRACTOR to request progress or final payment and which is to be accompanied by such supporting documentation as is required by the Contract Documents.

Asbestos - Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.

Bid - The offer or proposal of the Bidder submitted on the prescribed form setting forth the price or prices for the WORK.

Bonds - Bid, Performance, and Payment Bonds and other instruments which protect against loss due to inability or refusal of the CONTRACTOR to perform its contract.

CBJ Project Manager - The authorized representative of the City and Borough of Juneau Engineering Department, as OWNER, who is responsible for administration of the contract.

Change Order - A document recommended by the ENGINEER, which is signed by the CONTRACTOR and the OWNER and authorizes an addition, deletion, or revision in the WORK, or an adjustment in the Contract Price or the Contract Time, issued on or after the Effective Date of the Agreement.

Contract Documents - The Table of Contents, Notice Inviting Bids, Instructions to Bidders, Bid Forms (including the Bid, Bid Schedule(s), Information Required of Bidder, Bid Bond, and all required certificates and affidavits), Agreement, Performance Bond, Payment Bond, General Conditions, Supplementary General Conditions, Technical Specifications, Drawings, Permits, and all Addenda, and Change Orders executed pursuant to the provisions of the Contract Documents.

Contract Price - The total monies payable by the OWNER to the CONTRACTOR under the terms and conditions of the Contract Documents.

Contract Time - The number of successive calendar Days stated in the Contract Documents for the completion of the WORK.

CONTRACTOR - The individual, partnership, corporation, joint-venture or other legal entity with whom the OWNER has executed the Agreement.

## **SECTION 00700 - GENERAL CONDITIONS**

Day - A calendar day of 24 hours measured from midnight to the next midnight.

Defective WORK - WORK that is unsatisfactory, faulty, or deficient; or that does not conform to the Contract Documents; or that does not meet the requirements of any inspection, reference standard, test, or approval referred to in the Contract Documents; or WORK that has been damaged prior to the ENGINEER's recommendation of final payment.

Drawings - The Drawings, plans, maps, profiles, diagrams, and other graphic representations which indicate the character, location, nature, extent, and scope of the WORK and which have been prepared by the ENGINEER and are referred to in the Contract Documents. Shop Drawings are not within the meaning of this paragraph.

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.

Engineer of Record - The individual, partnership, corporation, joint-venture or other legal entity named as such in the Contract Documents.

ENGINEER - The ENGINEER is the firm or person(s) selected by the City and Borough of Juneau (CBJ) to perform the duties of project inspection and management. CBJ will inform the CONTRACTOR of the identity of the ENGINEER at or before the Notice to Proceed.

Field Order - A written order issued by the ENGINEER which may or may not involve a change in the WORK.

General Requirements - Division 1 of the Technical Specifications.

Hazardous Waste - The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 9603) as amended from time to time.

Holidays - The CBJ legal holidays occur on:

1. New Year's Day - January 1
2. Martin Luther King's Birthday - Third Monday in January
3. President's Day - Third Monday in February
4. Seward's Day - Last Monday in March
5. Memorial Day - Last Monday in May
6. Independence Day - July 4
7. Labor Day - First Monday in September
8. Alaska Day - October 18
9. Veteran's Day - November 11
10. Thanksgiving Day - Fourth Thursday and the following Friday in November
11. Christmas Day - December 25

If any holiday listed above falls on a Saturday, Saturday and the preceding Friday are both legal holidays. If the holiday should fall on a Sunday, Sunday and the following Monday are both legal holidays.

## **SECTION 00700 - GENERAL CONDITIONS**

**Inspector** - The authorized representative of the ENGINEER assigned to make detailed inspections for conformance to the Contract Documents. Any reference to the Resident Project Representative in this document shall mean the Inspector.

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

**Mechanic's Lien** - A form of security, an interest in real property, which is held to secure the payment of an obligation. When referred to in these Contract Documents, "Mechanic's Lien" or "lien" means "Stop Notice".

**Milestone** - A principal event specified in the Contract Documents relating to an intermediate completion date of a portion of the WORK, or a period of time within which the portion of the WORK should be performed prior to Substantial Completion of all the WORK.

**Notice of Award** - The written notice by the OWNER to the apparent successful bidder stating that the apparent successful bidder has complied with all conditions for award of the contract.

**Notice of Completion** - A form signed by the ENGINEER and the CONTRACTOR recommending to the OWNER that the WORK is Substantially Complete and fixing the date of Substantial Completion. After acceptance of the WORK by the OWNER's governing body, the form is signed by the OWNER and filed with the County Recorder. This filing starts the 30-day lien filing period on the WORK.

**Notice to Proceed** - The written notice issued by the OWNER to the CONTRACTOR authorizing the CONTRACTOR to proceed with the WORK and establishing the date of commencement of the Contract Time.

**Notice of Intent to Award** - The written notice by the OWNER to the apparent successful bidder stating that upon compliance by the apparent successful bidder with the requirements listed therein, within the time specified, the OWNER will enter into an Agreement.

**OWNER** - The City and Borough of Juneau (CBJ), acting through its legally designated officials, officers, or employees.

**Partial Utilization** - Use by the OWNER or a substantially completed part of the WORK for the purpose for which it is intended prior to Substantial Completion of all the WORK.

**PCB's** - Polychlorinated biphenyls.

**PERMITTEE** – See definition for CONTRACTOR.

**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 Wastes and crude oils.

**Project** - The total construction of which the WORK to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.

## **SECTION 00700 - GENERAL CONDITIONS**

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.

Shop Drawings - All Drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for the CONTRACTOR and submitted by the CONTRACTOR, to the ENGINEER, to illustrate some portion of WORK.

Specifications - Same definition as "Technical Specifications" hereinafter.

Stop Notice - A legal remedy for Subcontractors and suppliers who contribute to public works, but who are not paid for their WORK, which secures payment from construction funds possessed by the OWNER. For public property, the Stop Notice remedy is designed to substitute for mechanic's lien rights.

Sub-Consultant - The individual, partnership, corporation, joint-venture or other legal entity having a direct contract with ENGINEER, or with any of its Consultants to furnish services with respect to the Project.

Subcontractor - An individual, partnership, corporation, joint-venture or other legal entity having a direct contract with the CONTRACTOR, or with any of its Subcontractors, for the performance of a part of the WORK at the site.

Substantial Completion - Refers to when the WORK has progressed to the point where, in the opinion of the ENGINEER as evidenced by Notice of Completion as applicable, it is sufficiently complete, in accordance with the Contract Documents, so that the WORK can be utilized for the purposes for which it is intended; or if no such notice is issued, when final payment is due in accordance with Paragraph 14.8. The terms "substantially complete" and "substantially completed" as applied to any WORK refer to substantial completion thereof.

Supplementary General Conditions (SGC) - The part of the Contract Documents which make additions, deletions, or revisions to these General Conditions.

Supplier - A manufacturer, fabricator, supplier, distributor, materialman, or vendor.

Technical Specifications - Divisions 1 through 16 of the Contract Documents consisting of the General Requirements and written technical descriptions of products and execution of the WORK.

Underground Utilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: water, sewage and drainage removal, electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, traffic, or other control systems.

WORK, Work - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. WORK is the result of performing, or furnishing labor and furnishing and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents.

## **SECTION 00700 - GENERAL CONDITIONS**

### **ARTICLE 2 PRELIMINARY MATTERS**

- 2.1 DELIVERY OF BONDS/INSURANCE CERTIFICATES. When the CONTRACTOR delivers the signed Agreements to the OWNER, the CONTRACTOR shall also deliver to the OWNER such Bonds and Insurance Policies and Certificates as the CONTRACTOR may be required to furnish in accordance with the Contract Documents.
- 2.2 COPIES OF DOCUMENTS. The OWNER shall furnish to the CONTRACTOR the required number of copies of the Contract Documents specified in the Supplementary General Conditions.
- 2.3 COMMENCEMENT OF CONTRACT TIME; NOTICE TO PROCEED. The Contract Time will start to run on the commencement date stated in the Notice to Proceed.
- 2.4 STARTING THE WORK
- A. The CONTRACTOR shall begin to perform the WORK within 10 days after the commencement date stated in the Notice to Proceed, but no WORK shall be done at the site prior to said commencement date.
  - B. Before undertaking each part of the WORK, the CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. The CONTRACTOR shall promptly report in writing to the ENGINEER any conflict, error, or discrepancy which the CONTRACTOR may discover and shall obtain a written interpretation or clarification from the ENGINEER before proceeding with any WORK affected thereby.
  - C. The CONTRACTOR shall submit to the ENGINEER for review those documents called for under Section 01300 - CONTRACTOR Submittals in the General Requirements.
- 2.5 PRE-CONSTRUCTION CONFERENCE. The CONTRACTOR is required to attend a Pre-Construction Conference. This conference will be attended by the ENGINEER and others as appropriate in order to discuss the WORK in accordance with the applicable procedures specified in the General Requirements, Section 01010 - Summary of WORK in the General Requirements.
- 2.6 FINALIZING CONTRACTOR SUBMITTALS. At least 7 days before submittal of the first Application for Payment a conference attended by the CONTRACTOR, the ENGINEER and others as appropriate will be held to finalize the initial CONTRACTOR submittals in accordance with the General Requirements. As a minimum the CONTRACTOR's representatives should include the project manager and schedule expert. The CONTRACTOR should plan on this meeting taking no less than 8 hours. If the submittals are not finalized at the end of the meeting, additional meetings will be held so that the submittals can be finalized prior to the submittal of the first application for payment. No application for payment will be processed until CONTRACTOR submittals are finalized.

## **SECTION 00700 - GENERAL CONDITIONS**

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

#### **3.1 INTENT**

- A. The Contract Documents comprise the entire Agreement between the OWNER and the CONTRACTOR concerning the WORK. The Contract Documents shall be construed as a whole in accordance with Alaska Law.
- B. It is the intent of the Contract Documents to describe the WORK, functionally complete, to be constructed in accordance with the Contract Documents. Any work, materials, or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result shall be supplied whether or not specifically called for. When words or phrases which have a well-known technical or construction industry or trade meaning are used to describe work, materials, or equipment such words or phrases shall be interpreted in accordance with that meaning, unless a definition has been provided in Article 1 of the General Conditions. Reference to standard specifications, manuals, or codes of any technical society, organization, or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard specification, manual, code, or Laws or Regulations in effect at the time of opening of Bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual, or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of the OWNER, the CONTRACTOR, or the ENGINEER or any of their consultants, agents, or employees from those set forth in the Contract Documents.
- C. If, during the performance of the WORK, CONTRACTOR discovers any conflict, error, ambiguity or discrepancy within the Contract Documents or between the Contract Documents and any provision of any such Law or Regulation applicable to the performance of the WORK or of any such standard, specification, manual or code or of any instruction of any Supplier referred to in paragraph 6.5, the CONTRACTOR shall report it to the ENGINEER in writing at once, and the CONTRACTOR shall not proceed with the WORK affected thereby (except in an emergency as authorized by the ENGINEER) until a clarification field order, or Change Order to the Contract Documents has been issued.

#### **3.2 ORDER OF PRECEDENCE OF CONTRACT DOCUMENTS**

- A. In resolving conflicts resulting from, errors, or discrepancies in any of the Contract Documents, the order of precedence shall be as follows:
  - 1. Permits from other agencies as may be required by law, excepting the definition of "PERMITEE" in these permits.
  - 2. Field Orders
  - 3. Change Orders
  - 4. ENGINEER's written interpretations and clarifications.
  - 5. Agreement
  - 6. Addenda
  - 7. CONTRACTOR's Bid (Bid Form)
  - 8. Supplementary General Conditions
  - 9. Notice Inviting Bids

## SECTION 00700 - GENERAL CONDITIONS

10. Instructions to Bidders
11. General Conditions
12. Technical Specifications
13. Drawings

B. With reference to the Drawings the order of precedence is as follows:

1. Figures govern over scaled dimensions
2. Detail Drawings govern over general Drawings
3. Addenda/ Change Order drawings govern over Contract Drawings
4. Contract Drawings govern over standard drawings

3.3 AMENDING AND SUPPLEMENTING CONTRACT DOCUMENTS. 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 a Change Order (pursuant to Article 10 CHANGES IN THE WORK).

3.4 REUSE OF DOCUMENTS. Neither the CONTRACTOR, nor any Subcontractor or Supplier, nor any other person or organization performing any of the WORK under a contract with the OWNER shall have or acquire any title to or ownership rights in any of the Drawings, Technical Specifications, or other documents used on the WORK, and they shall not reuse any of them on the extensions of the Project or any other project without written consent of the OWNER.

### ARTICLE 4 AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

4.1 AVAILABILITY OF LANDS. The OWNER shall furnish, as indicated in the Contract Documents, the lands upon which the WORK is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of the CONTRACTOR. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the OWNER, unless otherwise provided in the Contract Documents. Nothing contained in the Contract Documents shall be interpreted as giving the CONTRACTOR exclusive occupancy of the lands or rights-of-way provided. The CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment; provided, that the CONTRACTOR shall not enter upon nor use any property not under the control of the OWNER until a written temporary construction easement, lease or other appropriate agreement has been executed by the CONTRACTOR and the property owner, and a copy of said agreement furnished to the ENGINEER prior to said use; and, neither the OWNER nor the ENGINEER shall be liable for any claims or damages resulting from the CONTRACTOR's unauthorized trespass or use of any such properties.

#### 4.2 PHYSICAL CONDITIONS - SUBSURFACE AND EXISTING STRUCTURES

A. Explorations and Reports. Reference is made to SGC 4.2 Physical Conditions of the Supplementary General Conditions for identification of those reports of explorations and tests of sub-surface conditions at the site that have been utilized by the ENGINEER in the preparation of the Contract Documents. The CONTRACTOR may rely upon the accuracy of the technical data contained in such reports, however, reports are not to be considered complete or comprehensive and nontechnical data, interpretations, and opinions contained in such reports are not to be relied on by the CONTRACTOR. The CONTRACTOR is

## **SECTION 00700 - GENERAL CONDITIONS**

responsible for any further explorations or tests that may be necessary and any interpretation, interpolation, or extrapolation that it makes of any information shown in such reports.

- B. Existing Structures. Reference is made to SGC 4.2 Physical Conditions of the Supplementary General Conditions for identification of those drawings of physical conditions in or relating to existing surface and subsurface structures (except Underground Utilities referred to in Paragraph 4.4 herein) which are at or contiguous to the site that have been utilized by the ENGINEER in the preparation of the Contract Documents. The CONTRACTOR may rely upon the accuracy of the technical data contained in such drawings, however, nontechnical data, interpretations, and opinions contained in such drawings are not to be relied on by the CONTRACTOR. The CONTRACTOR is also responsible for any interpretation, interpolation, or extrapolation that it makes of any information shown in such drawings.

### **4.3 DIFFERING SITE CONDITIONS**

- A. The CONTRACTOR shall promptly upon discovery (but in no event later than 14 days thereafter) and before the following conditions are disturbed, notify the ENGINEER, in writing of any:
  - 1. Material that the CONTRACTOR believes may be material that is hazardous waste, as defined in Article 1 of these General Conditions, or asbestos, PCB's, petroleum or any other substance or material posing a threat to human or to the environment.
  - 2. Subsurface or latent physical conditions at the site differing from those indicated.
  - 3. Unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in WORK of the character provided for in the contract.
- B. The OWNER shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the CONTRACTOR's cost of, or the time required for, performance of any part of the WORK shall issue a Change Order under the procedures described in the contract.
- C. In the event that a dispute arises between the OWNER and the CONTRACTOR whether the conditions materially differ, or involved hazardous waste or other materials listed above, or cause a decrease or increase in the CONTRACTOR's cost of, or time required for, performance of any part of the WORK, the CONTRACTOR shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all WORK to be performed under the contract. The CONTRACTOR shall retain any and all rights provided either by contract or by Law which pertain to the resolution of disputes and protests between the contracting parties.

### **4.4 PHYSICAL CONDITIONS - UNDERGROUND UTILITIES**

- A. Indicated. The information and data indicated in the Contract Documents with respect to existing Underground Utilities at or contiguous to the site are based on information and data furnished to the OWNER or the ENGINEER by the owners of such Underground Utilities or by others. Unless it is expressly provided in the Supplementary General Conditions and/or Section 01530 - Protection and Restoration of Existing Facilities of the General Requirements, the OWNER and the ENGINEER shall not be responsible for the accuracy or

## **SECTION 00700 - GENERAL CONDITIONS**

completeness of any such information or data, and the CONTRACTOR shall have full responsibility for reviewing and checking all such information and data, for locating all Underground Utilities indicated in the Contract Documents, for coordination of the WORK with the owners of such Underground Utilities during construction, for the safety and protection thereof and repairing any damage thereto resulting from the WORK, the cost of which will be considered as having been included in the Contract Price.

- B. Not Indicated. If an Underground Utility is uncovered or revealed at or contiguous to the site which was not indicated in the Contract Documents and which the CONTRACTOR could not reasonably have been expected to be aware of, the CONTRACTOR shall identify the owner of such Underground Utility and give written notice thereof to that owner and shall notify the ENGINEER in accordance with the requirements of the Supplementary General Conditions and Section 01530 - Protection and Restoration of Existing Facilities of the General Requirements.

### **4.5 REFERENCE POINTS**

- A. The ENGINEER will provide one bench mark, near or on the site of the WORK, and will provide two points near or on the site to establish a base line for use by the CONTRACTOR for alignment control. Unless otherwise specified in the General Requirements, the CONTRACTOR shall furnish all other lines, grades, and bench marks required for proper execution of the WORK.
- B. The CONTRACTOR shall preserve all bench marks, stakes, and other survey marks, and in case of their removal or destruction by its own employees or by its Subcontractor's employees, the CONTRACTOR shall be responsible for the accurate replacement of such reference points by personnel qualified under the Alaska Statute governing the licensing of Architects, Engineers, and Land Surveyors.

### **4.6 USE OF THE CBJ/STATE LEMON CREEK GRAVEL PIT**

- A. On City and Borough of Juneau (CBJ) construction projects, the CBJ may make unclassified material available to CONTRACTORs, from the CBJ/State Lemon Creek gravel pit, at a rate less than charged other customers. CONTRACTORs are not required to use material from the CBJ/State pit and the CBJ makes no guarantee as to the quantity or quality of the available material. For this Project, the price shall be \$1.90 per ton.
- B. CONTRACTORs proposing to use gravel from the CBJ/State pit are required to be in good standing for all amounts owed to the CBJ, for previous gravel operations, prior to submitting a mining plan for approval. CONTRACTORs using the pit must comply with Allowable Use Permit USE 98-00047. Failure to meet these requirements, if so subject, shall be sufficient reason to deny use of the CBJ/State pit as a gravel source. To determine if your company is subject to these requirements, contact the CBJ Engineering Department, Gravel Pit Management, at (907) 586-0800.
- C. CONTRACTORs deciding to use material from the CBJ/State pit shall provide an Individual Mining Plan prepared by a professional engineer registered in the State of Alaska. The Individual Mining Plan must be reviewed and approved by the CBJ, prior to commencing operations within the pit. CONTRACTORs shall also secure a Performance Bond to ensure

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compliance with contract provisions, including any Individual Mining Plan stipulations. The bond shall remain in full force and effect until a release is obtained from the CBJ.

- D. If CONTRACTOR operations for a project do not exceed 500 tons of material, the CONTRACTOR will not be required to provide an Individual Mining Plan prepared by an engineer. However, the CONTRACTOR must submit an Individual Mining Plan that is in compliance with Allowable Use Permit USE 98-00047 for gravel extraction within the CBJ/State pit. The CONTRACTOR must contact the CBJ Engineering Department for conditions for the extraction.
- E. CONTRACTORS using the CBJ material may do primary dry separation (screening) of materials within the pit. Crushing and washing of material will not be allowed. CONTRACTORS shall account for placement of materials removed from the pit. The CBJ may require CONTRACTORS to cross-check weight tickets, submit to an audit, or participate in other measures required by the CBJ to ensure accountability. Unprocessed overburden removed from the pit will not be weighed. All other material mined will be weighed at the CBJ scale. CONTRACTORS will be responsible for loading and/or screening their own material. If asphalt pavement is removed as part of the WORK, CONTRACTORS shall dispose of the material at a to-be-specified location within the pit area, as directed by the CBJ Project Manager.
- F. The gravel pit overhead charge shall be paid to the CBJ by the CONTRACTOR within 60 days after removal of all materials from the pit and prior to requesting and/or receiving final payment. Upon completion of each excavation CONTRACTORS shall notify the CBJ, in writing, in sufficient time to perform a field-compliance examination prior to vacating the pit. Any significant deviation from the stipulations of the Individual Mining Plan identified during the field inspection shall be corrected by the CONTRACTOR prior to release of the bond. A signed release from CBJ will be required prior to releasing the CONTRACTOR's bond.
- G. If asphalt pavement is removed as part of this WORK, the CONTRACTOR shall dispose of the material at the location designated as the Asphalt Storage Facility, or as directed by the ENGINEER.
- H. The CBJ/State pit is a seasonal operation. The hours of operation are from 7:00 a.m. to 6:00 p.m., Monday through Friday, from April 1 through October 15 of the year. CONTRACTORS may obtain gravel on weekends, or during the off-season, by applying for a separate agreement with the City and Borough of Juneau Engineering Department. The CONTRACTOR will be responsible for any additional costs incurred during weekend or off-season operations at the gravel pit.
- I. All Contractors/Equipment Operators using the CBJ/State Pit shall be in compliance with Federal Mine Safety and Health Administration regulations for quarry and gravel operations.

## **ARTICLE 5 BONDS AND INSURANCE**

### **5.1 PERFORMANCE, PAYMENT, AND OTHER BONDS**

- A. The CONTRACTOR shall furnish, when required, Performance and Payment Bonds on forms provided by the CBJ for the penal sums of 100% of the amount of the Bid award. The

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surety on each bond may be any corporation or partnership authorized to do business in the State of Alaska as an insurer under AS 21.09. These bonds shall remain in effect for 12 months after the date of final payment and until all obligations and liens under this contract have been satisfied. The CONTRACTOR shall also furnish such other Bonds as are required by the Supplementary General Conditions. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff, Bureau of Government Financial Operations, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

- B. If the surety on any Bond furnished by the CONTRACTOR is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the WORK is located, the CONTRACTOR shall within 7 days thereafter substitute another Bond and Surety, which must be acceptable to the OWNER.
- C. All Bonds required by the Contract Documents to be purchased and maintained by CONTRACTOR shall be obtained from surety companies that are duly licensed or authorized in the State of Alaska to issue Bonds for the limits so required. Such surety companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary General Conditions. The City Engineer may, on behalf of the OWNER, notify the surety of any potential default or liability.

### 5.2 INSURANCE

- A. The CONTRACTOR shall purchase and maintain the insurance required under this paragraph. Such insurance shall include the specific coverages set out herein and be written for not less than the limits of liability and coverages provided in the Supplementary General Conditions, or required by law, whichever are greater. All insurance shall be maintained continuously during the life of the Agreement up to the date of Final Completion and at all times thereafter when the CONTRACTOR may be correcting, removing, or replacing Defective WORK in accordance with Paragraph 13.6, but the CONTRACTOR's liabilities under this Agreement shall not be deemed limited in any way to the insurance coverage required.
- B. All insurance required by the Contract Documents to be purchased and maintained by the CONTRACTOR shall be obtained from insurance companies that are duly licensed or authorized in the State of Alaska to issue insurance policies for the limits and coverages so required. Such insurance companies shall have a current Best's Rating of at least an "A" (Excellent) general policy holder's rating and a Class VII financial size category and shall also meet such additional requirements and qualifications as may be provided in the Supplementary General Conditions.
- C. The CONTRACTOR shall furnish the OWNER with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies. All of the policies of insurance so required to be purchased and maintained (or the certificates or other evidence thereof) shall contain a provision or endorsement that the coverage afforded will not be cancelled, reduced in coverage, or renewal refused until at least 30 days' prior written

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notice has been given to the OWNER by certified mail. All such insurance required herein (except for Workers' Compensation and Employer's Liability) shall name the OWNER, its Consultants and subconsultants and their officers, directors, agents, and employees as "additional insureds" under the policies. The CONTRACTOR shall purchase and maintain the following insurance:

1. Workers' Compensation and Employer's Liability. This insurance shall protect the CONTRACTOR against all claims under applicable state workers' compensation laws. The CONTRACTOR shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a Workers' Compensation law. This policy shall include an "all states" endorsement. The CONTRACTOR shall require each Subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees to be engaged in such WORK unless such employees are covered by the protection afforded by the CONTRACTOR's Workers' Compensation Insurance. In case any class of employees is not protected, under the Workers' Compensation Statute, the CONTRACTOR shall provide and shall cause each Subcontractor to provide adequate employer's liability insurance for the protection of such of its employees as are not otherwise protected.
2. Commercial General Liability. This insurance shall be written in comprehensive form and shall protect the CONTRACTOR against all claims arising from injuries to persons other than its employees or damage to property of the OWNER or others arising out of any act or omission of the CONTRACTOR or its agents, employees, or Subcontractors. The policy shall contain no exclusions for any operations within the scope of this contract.
3. Comprehensive Automobile Liability. This insurance shall be written in comprehensive form and shall protect the CONTRACTOR against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, and shall cover operation on or off the site of all motor vehicles licensed for highway use, whether they are owned, non-owned, or hired. Coverage for hired motor vehicles should include endorsement covering liability assumed under this Agreement.
4. Subcontractor's Commercial General Liability Insurance and Commercial Automobile Liability Insurance. The CONTRACTOR shall either require each of its Subcontractors to procure and to maintain Subcontractor's Commercial General Liability and Property Damage Insurance and Vehicle Liability Insurance of the type and in the amounts specified in the Supplementary General Conditions or insure the activities of its Subcontractors in the CONTRACTOR's own policy, in like amount.
5. Builder's Risk. This insurance shall be of the "all risks" type, shall be written in completed value form, and shall protect the CONTRACTOR, the OWNER, and the ENGINEER, against risks of damage to buildings, structures, and materials and equipment. The amount of such insurance shall be not less than the insurable value of the WORK at completion. Builder's risk insurance shall provide for losses to be payable to the CONTRACTOR and the OWNER, as their interests may appear. The policy shall contain a provision that in the event of payment for any loss under the coverage provided, the insurance company shall have no rights of recovery against the CONTRACTOR, the OWNER, and the ENGINEER. The Builder's Risk policy shall insure against all risks of direct physical loss or damage to property from any external

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cause including flood and earthquake. Allowable exclusions, if any, shall be as specified in the Supplementary General Conditions.

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

#### **6.1 SUPERVISION AND SUPERINTENDENCE**

- A. The 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. The CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences, and procedures of construction and safety precautions and programs incidental thereto. The CONTRACTOR shall be responsible to see that the completed WORK complies accurately with the Contract Documents.
- B. The CONTRACTOR shall designate in writing and keep on the WORK site at all times during its progress a technically qualified, English-speaking superintendent, who is an employee of the CONTRACTOR and who shall not be replaced without written notice to the OWNER and the ENGINEER. The superintendent will be the CONTRACTOR's representative at the site and shall have authority to act on behalf of the CONTRACTOR. All communications given to the superintendent shall be as binding as if given to the CONTRACTOR. The CONTRACTOR shall issue all its communications to the OWNER through the ENGINEER and the ENGINEER only.
- C. The CONTRACTOR's superintendent shall be present at the site of the WORK at all times while WORK is in progress. Failure to observe this requirement shall be considered suspension of the WORK by the CONTRACTOR until such time as such superintendent is again present at the site.

#### **6.2 LABOR, MATERIALS, AND EQUIPMENT**

- A. The CONTRACTOR shall provide competent, suitably qualified personnel to survey and lay out the WORK and perform construction as required by the Contract Documents. The CONTRACTOR shall furnish, erect, maintain, and remove the construction plant and any temporary works as may be required. The CONTRACTOR shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the WORK or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all WORK at the site shall be performed during regular working hours, and the CONTRACTOR will not permit overtime work or the performance of work on Saturday, Sunday, or any legal holiday without the OWNER's written consent. The CONTRACTOR shall apply for this consent through the ENGINEER.
- B. Except as otherwise provided in this Paragraph, the CONTRACTOR shall receive no additional compensation for overtime work, i.e., work in excess of 8 hours in any one calendar day or 40 hours in any one calendar week, even though such overtime work may be required under emergency conditions and may be ordered by the ENGINEER in writing. Additional compensation will be paid the CONTRACTOR for overtime work only in the event extra work is ordered by the ENGINEER and the Change Order specifically authorizes

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the use of overtime work and then only to such extent as overtime wages are regularly being paid by the CONTRACTOR for overtime work of a similar nature in the same locality.

- C. All costs of inspection and testing performed during overtime work by the CONTRACTOR which is allowed solely for the convenience of the CONTRACTOR shall be borne by the CONTRACTOR. The OWNER shall have the authority to deduct the cost of all such inspection and testing from any partial payments otherwise due to the CONTRACTOR.
  - D. Unless otherwise specified in the Contract Documents, the CONTRACTOR shall furnish and assume full responsibility for all materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up, and completion of the WORK.
  - E. All materials and equipment to be incorporated into the WORK shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of the OWNER. If required by the ENGINEER, the CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provisions of any such instructions will be effective to assign to the ENGINEER, or any of the ENGINEER consultants, agents, or employees, any duty or authority to supervise or direct the furnishing or performance of the WORK or any duty or authority to undertake responsibility contrary to the provisions of Paragraphs 9.9C and 9.9D.
  - F. The CONTRACTOR shall at all times employ sufficient labor and equipment for prosecuting the several classes of WORK to full completion in the manner and time set forth in and required by these specifications. All workers shall have sufficient skill and experience to perform properly the WORK assigned to them. Workers engaged in special WORK, or skilled WORK, shall have sufficient experience in such WORK and in the operation of the equipment required to perform all WORK, properly and satisfactorily.
  - G. Any person employed by the CONTRACTOR or by any Subcontractor who, in the opinion of the ENGINEER, does not perform the WORK in a proper and skillful manner, or is intemperate or disorderly shall, at the written request of the ENGINEER, be removed forthwith by the CONTRACTOR or Subcontractor employing such person, and shall not be employed again in any portion of the WORK without the approval of the ENGINEER. Should the CONTRACTOR fail to remove such person or persons as required above, or fail to furnish suitable and sufficient personnel for the proper prosecution of the WORK, the ENGINEER may suspend the WORK by written notice until such orders are complied with.
- 6.3 ADJUSTING PROGRESS SCHEDULE. The CONTRACTOR shall submit monthly updates of the progress schedule to the ENGINEER for acceptance in accordance with the provisions in Section 01300 - CONTRACTOR Submittals in the General Requirements.

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- 6.4 SUBSTITUTES OR "OR-EQUAL" ITEMS. The CONTRACTOR shall submit proposed substitutes or "or-equal" items in accordance with the provisions in Section 01300 - CONTRACTOR Submittals in the General Requirements.
- 6.5 CONCERNING SUBCONTRACTORS, SUPPLIERS, AND OTHERS.
- A. The CONTRACTOR shall be responsible to the OWNER and the ENGINEER for the acts and omissions of its Subcontractors and their employees to the same extent as CONTRACTOR is responsible for the acts and omissions of its own employees. Nothing contained in this Paragraph shall create any contractual relationship between any Subcontractor and the OWNER or the ENGINEER nor relieve the CONTRACTOR of any liability or obligation under the prime contract.
  - B. The CONTRACTOR shall perform not less than 40% of the WORK with its own forces (i.e., without subcontracting). The 40% requirement shall be understood to mean that the CONTRACTOR shall perform, with its own organization, WORK amounting to at least 40% of the awarded contract amount. The 40% requirement will be calculated based upon the total of the subcontract amounts submitted for contract award, and any other information requested by the OWNER from the apparent low bidder.
- 6.6 PERMITS
- A. Unless otherwise provided in the Supplementary General Conditions, the CONTRACTOR shall obtain and pay for all construction permits and licenses from the agencies having jurisdiction, including the furnishing of insurance and bonds if required by such agencies. The enforcement of such requirements under this contract shall not be made the basis for claims for additional compensation. The OWNER shall assist the CONTRACTOR, when necessary, in obtaining such permits and licenses. The 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. The CONTRACTOR shall pay all charges of utility owners for connections to the WORK.
  - B. These Contract Documents may require that the WORK be performed within the conditions and/or requirements of local, state and/or federal permits. These permits may be bound within the Contract Documents, included within the Contract Documents by reference, or included as part of the WORK, as designated in this Section. The CONTRACTOR is responsible for completing the WORK required for compliance with all permit requirements; this WORK is incidental to other items in the Contract Documents. Any reference to the PERMITTEE in the permits shall mean the CONTRACTOR. If any permits were acquired by the OWNER, this action was done to expedite the start of construction. If the CONTRACTOR does not complete the WORK within the specified permit window, the CONTRACTOR shall be responsible for the permit extension, and for completing any additional requirements placed upon the permit.
  - C. The OWNER shall apply for, and obtain, the necessary building permit for this Project, however, the CONTRACTOR is responsible for scheduling and coordinating all necessary inspections. The CBJ Inspection number is 586-1703. All other provisions of this Section remain in effect.

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- 6.7 **PATENT FEES AND ROYALTIES.** The 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, software 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 the OWNER or the 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 the OWNER in the Contract Documents. The CONTRACTOR shall indemnify, defend and hold harmless the OWNER and the ENGINEER and anyone directly or indirectly employed by either of them from and against all claims, damages, losses, and expenses (including attorneys' fees and court costs) arising out of 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, and shall defend all such claims in connection with any alleged infringement of such rights.
- 6.8 **LAWS AND REGULATIONS.** The CONTRACTOR shall observe and comply with all federal, state, and local laws, ordinances, codes, orders, and regulations which in any manner affect those engaged or employed on the WORK, the materials used in the WORK, or the conduct of the WORK. If any discrepancy or inconsistency should be discovered in this contract in relation to any such law, ordinance, code, order, or regulation, the CONTRACTOR shall report the same in writing to the ENGINEER. The CONTRACTOR shall indemnify, defend, and hold harmless the OWNER, the ENGINEER, and their officers, agents, and employees against all claims or liability arising from violation of any such law, ordinance, code, order, or regulation, whether by CONTRACTOR or by its employees, Subcontractors, or third parties. Any particular law or regulation specified or referred to elsewhere in the Contract Documents shall not in any way limit the obligation of the CONTRACTOR to comply with all other provisions of federal, state, and local laws and regulations. The OWNER may, per AS 36.30, audit the CONTRACTOR's or Subcontractor(s) records that are related to the cost or pricing data for this contract, all related Change Orders, and/or contract modifications.
- 6.9 **TAXES.** The CONTRACTOR shall pay all sales, consumer, use, and other similar taxes required to be paid by the CONTRACTOR in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the WORK.
- 6.10 **USE OF PREMISES.** The CONTRACTOR shall confine construction equipment, the storage of materials and equipment, and the operations of workers to (1) the Project site, (2) the land and areas identified in and permitted by the Contract Documents, and (3) the other land and areas permitted by Laws and Regulations, rights-of-way, permits, leases and easements. The CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the WORK. Should any claim be made against the OWNER or the ENGINEER by any such owner or occupant because of the performance of the WORK, the CONTRACTOR shall promptly attempt to settle with such other party by agreement or otherwise resolve the claim through litigation. The CONTRACTOR shall, to the fullest extent permitted by Laws and Regulations, indemnify, defend, and hold the OWNER and the ENGINEER harmless from and against all claims, damages, losses, and expenses (including, but not limited to, fees of engineers attorneys, and other professionals and court costs) arising directly, indirectly, or consequentially out of any action, legal or equitable, brought by any such owner or occupant against the OWNER, the ENGINEER, their Consultants, Sub-consultants, and the officers,

## **SECTION 00700 - GENERAL CONDITIONS**

directors, employees and agents of each and any of them to the extent caused by or based upon the CONTRACTOR's performance of the WORK.

### **6.11 SAFETY AND PROTECTION**

- A. The CONTRACTOR shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the WORK. The 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 employees on the WORK and other persons and organizations who may be affected thereby;
  - 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, and utilities not designated for removal, relocation, or replacement in the course of construction.
- B. The CONTRACTOR shall comply with all applicable Laws and Regulations whether referred to herein or not) of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury, or loss and shall erect and maintain all necessary safeguards for such safety and protection. The CONTRACTOR shall notify owners of adjacent property and utilities when prosecution of the WORK may affect them, and shall cooperate with them in the protection, removal, relocation, and replacement of their property.
- C. The 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 program.
- D. Materials that contain hazardous substances or mixtures may be required on the WORK. A Material Safety Data Sheet shall be requested by the CONTRACTOR from the manufacturer of any hazardous product used.
- E. Material usage shall be accomplished with strict adherence to all safety requirements and all manufacturer's warnings and application instructions listed on the Material Safety Data Sheet and on the product container label.
- F. The CONTRACTOR shall be responsible for coordinating communications on any exchange of Material Safety Data Sheets or other hazardous material information that is required to be made available to, or exchanged between, or among, employers at the site in accordance with Laws or Regulations.
- G. The CONTRACTOR shall notify the ENGINEER if it considers a specified product or its intended usage to be unsafe. This notification must be given to the ENGINEER prior to the product being ordered, or if provided by some other party, prior to the product being incorporated in the WORK.

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### **6.12 SHOP DRAWINGS AND SAMPLES**

- A. After checking and verifying all field measurements and after complying with applicable procedures specified in the General Requirements, the CONTRACTOR shall submit to the ENGINEER for review, all Shop Drawings in accordance with Section 01300 - CONTRACTOR Submittals in the General Requirements.
- B. The CONTRACTOR shall also submit to the ENGINEER for review all samples in accordance with Section 01300 - CONTRACTOR Submittals in the General Requirements.
- C. Before submittal of each shop drawing or sample, the CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers, and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the WORK and the Contract Documents.

### **6.13 CONTINUING THE WORK.** The CONTRACTOR shall carry on the WORK and adhere to the progress schedule during all disputes or disagreements with the OWNER. No work shall be delayed or postponed pending resolution of any disputes or disagreements, except as the CONTRACTOR and the OWNER may otherwise agree in writing.

### **6.14 INDEMNIFICATION**

- A. To the fullest extent permitted by Laws and Regulations, the CONTRACTOR shall indemnify, defend, and hold harmless the OWNER, the ENGINEER, their Consultants, Sub-consultants and the officers, directors, employees, and agents of each and any of them, against and from all claims and liability arising under, by reason of or incidentally to the contract or any performance of the WORK, but not from the sole negligence or willful misconduct of the OWNER, and the ENGINEER. Such indemnification by the CONTRACTOR shall include but not be limited to the following:
  - 1. Liability or claims resulting directly or indirectly from the negligence or carelessness of the CONTRACTOR, its employees, or agents in the performance of the WORK, or in guarding or maintaining the same, or from any improper materials, implements, or appliances used in its construction, or by or on account of any act or omission of the CONTRACTOR, its employees, agents, or third parties;
  - 2. Liability or claims arising directly or indirectly from bodily injury, occupational sickness or disease, or death of the CONTRACTOR's or Subcontractor's own employees engaged in the WORK resulting in actions brought by or on behalf of such employees against the OWNER, and the ENGINEER;
  - 3. Liability or claims arising directly or indirectly from or based on the violation of any law, ordinance, regulation, order, or decree, whether by the CONTRACTOR, its employees, or agents;
  - 4. Liability or claims arising directly or indirectly from the use or manufacture by the CONTRACTOR, its employees, or agents in the performance of this contract of any copyrighted or non-copyrighted composition, secret process, patented or non-patented invention, computer software, article, or appliance, unless otherwise specifically stipulated in this contract.

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5. Liability or claims arising directly or indirectly from the breach of any warranties, whether express or implied, made to the OWNER or any other parties by the CONTRACTOR, its employees, or agents;
  6. Liabilities or claims arising directly or indirectly from the willful or criminal misconduct of the CONTRACTOR, its employees, or agents; and,
  7. Liabilities or claims arising directly or indirectly from any breach of the obligations assumed herein by the CONTRACTOR.
- B. The CONTRACTOR shall reimburse the ENGINEER and the OWNER for all costs and expenses, (including but not limited to fees and charges of engineers, attorneys, and other professionals and court costs including all costs of appeals) incurred by said OWNER, and the ENGINEER in enforcing the provisions of this Paragraph 6.14.
- C. The indemnification obligation under this Paragraph 6.14 shall not be limited in any way by any limitation of the amount or type of damages, compensation, or benefits payable by or for the CONTRACTOR or any such Subcontractor or other person or organization under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- 6.15 **CONTRACTOR'S DAILY REPORTS.** The CONTRACTOR shall complete a daily report indicating total manpower for each construction trade, major equipment on site, each Subcontractor's manpower, weather conditions, etc., involved in the performance of the WORK. The daily report shall be completed on forms provided by the ENGINEER and shall be submitted to the ENGINEER at the conclusion of each workday. The report should comment on the daily progress and status of the WORK within each major component of the WORK. These components will be decided by the ENGINEER. CONTRACTOR shall record the name, affiliation, time of arrival and departure, and reason for visit for all visitors to the location of the WORK.
- 6.16 **ASSIGNMENT OF CONTRACT.** The CONTRACTOR shall not assign, sublet, sell, transfer, or otherwise dispose of the contract or any portion thereof, or its right, title, or interest therein, or obligations thereunder, without the written consent of the OWNER except as imposed by law. If the CONTRACTOR violates this provision, the contract may be terminated at the option of the OWNER. In such event, the OWNER shall be relieved of all liability and obligations to the CONTRACTOR and to its assignee or transferee, growing out of such termination.
- 6.17 **CONTRACTOR'S RESPONSIBILITY FOR UTILITY PROPERTY AND SERVICES.** It is understood that any turn-on or turn-off, line locates and any other work or assistance necessary by the CBJ Water Utilities Division, will be at the CONTRACTOR's expense unless otherwise stated in the bid documents. All cost must be agreed to prior to any related actions, and will be considered incidental to the project cost. Billing to the CONTRACTOR will be direct from the CBJ Water Utilities Division.
- 6.18 **OPERATING WATER SYSTEM VALVES**
- A. The CONTRACTOR shall submit a written request, to the ENGINEER, for approval to operate any valve on any in-service section of the CBJ water system. The request must be submitted at least 24-hours prior to operating any valves. The CBJ Water Utilities Division reserves the right to approve or deny the request. The request shall specifically identify each valve to be operated, the time of operation, and the operation to be performed. The

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CONTRACTOR shall obtain the written approval of the ENGINEER for any scheduled operation before operating any valve.

- B. The CONTRACTOR shall be responsible for all damages, both direct and consequential, to the City or any other party, caused by unauthorized operation of any valve of the CBJ water system.

6.19 **CONTRACTOR'S WORK SCHEDULE LIMITATIONS.** Construction of Buildings and Projects. It is unlawful to operate any pile driver, power shovel, pneumatic hammer, derrick, power hoist, or similar heavy construction equipment before 7:00 a.m. or after 10:00 p.m., Monday through Friday, or before 9:00 a.m. or after 10:00 p.m., Saturday and Sunday, unless a permit shall first be obtained from the City and Borough Building Official. Such permit shall be issued by the Building Official only upon a determination that such operation during hours not otherwise permitted hereunder is necessary and will not result in unreasonable disturbance to surrounding residents.

## **ARTICLE 7 OTHER WORK**

### **7.1 RELATED WORK AT SITE**

- A. The OWNER may perform other work related to the Project at the site by the OWNER's own forces, have other work performed by utility owners, or let other direct contracts therefor which may contain General Conditions similar to these. If the fact that such other work is to be performed was not noted in the Contract Documents, written notice thereof will be given to the CONTRACTOR prior to starting any such other work.
- B. The CONTRACTOR shall afford each other contractor who is a party to such a direct contract and each utility owner (or the OWNER, if the OWNER is performing the additional work with the OWNER's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the WORK with theirs. The CONTRACTOR shall do all cutting, fitting, and patching of the WORK that may be required to make its several parts come together properly and integrate with such other work. The CONTRACTOR shall not endanger any work of others by cutting, excavating, or otherwise altering their work and will only cut or alter their work with the written consent of the ENGINEER and the others whose work will be affected.
- C. If the proper execution or results of any part of the CONTRACTOR's work depends upon the work of any such other contractor or utility owner (or OWNER), the CONTRACTOR shall inspect and report to the ENGINEER in writing any delays, defects, or deficiencies in such other work that render it unavailable or unsuitable for such proper execution and results. The CONTRACTOR's failure to report such delays, defects, or deficiencies will constitute an acceptance of the other work as fit and proper for integration with the CONTRACTOR's work except for latent or nonapparent defects and deficiencies in the other work.

7.2 **COORDINATION.** If the OWNER contracts with others for the performance of other work on the Project at the site, the person or organization who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified in the Supplementary General Conditions, and the specific matters to be covered by such authority and

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responsibility will be itemized and the extent of such authority and responsibilities will be provided in the Supplementary General Conditions.

### **ARTICLE 8 OWNER'S RESPONSIBILITIES**

#### **8.1 COMMUNICATIONS**

- A. The OWNER shall issue all its communications to the CONTRACTOR through the ENGINEER.
- B. The CONTRACTOR shall issue all its communications to the OWNER through the ENGINEER.

8.2 PAYMENTS. The OWNER shall make payments to the CONTRACTOR as provided in Paragraphs 14.5, 14.8, 14.9 and 14.10.

8.3 LANDS, EASEMENTS, AND SURVEYS. The OWNER's duties in respect of providing lands and easements and providing surveys to establish reference points are set forth in Paragraphs 4.1 and 4.5.

8.4 CHANGE ORDERS. The OWNER shall execute Change Orders as indicated in Paragraph 10.1F.

8.5 INSPECTIONS AND TESTS. The OWNER's responsibility in respect of inspections, tests, and approvals is set forth in Paragraph 13.3.

8.6 SUSPENSION OF WORK. In connection with the OWNER's right to stop WORK or suspend WORK, see Paragraphs 13.4 and 15.1.

8.7 TERMINATION OF AGREEMENT. Paragraphs 15.2 and 15.3 deal with the OWNER's right to terminate services of the CONTRACTOR.

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

9.1 OWNER'S REPRESENTATIVE. The ENGINEER will be the OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of the ENGINEER as the OWNER's representative during construction are set forth in the Contract Documents.

9.2 VISITS TO SITE. The ENGINEER will make visits to the site during construction to observe the progress and quality of the WORK and to determine, in general, if the WORK is proceeding in accordance with the Contract Documents. Exhaustive or continuous on-site inspections to check the quality or quantity of the WORK will not be required of the ENGINEER. The ENGINEER will not, during such visits, or as a result of such observations of the CONTRACTOR's WORK in progress, supervise, direct, or have control over the CONTRACTOR's WORK.

9.3 PROJECT REPRESENTATION. The ENGINEER may furnish an Inspector to assist in observing the performance of the WORK. The duties, responsibilities, and limitations of authority are as follows:

- A. Duties, Responsibilities and Limitations of Authority of Inspector

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General. The Inspector, who is the ENGINEER's Agent, will act as directed by and under the supervision of the ENGINEER and will confer with the ENGINEER regarding its actions. The Inspector's dealings in matters pertaining to the on-site WORK shall, in general, be only with the ENGINEER and the CONTRACTOR, and dealings with Subcontractors shall only be through or with the full knowledge of the CONTRACTOR. Written communication with the OWNER will be only through or as directed by the ENGINEER.

Duties and Responsibilities. The Inspector may:

1. Review the progress schedule, list of Shop Drawing submittals and schedule of values prepared by the CONTRACTOR and consult with the ENGINEER concerning their acceptability.
2. Attend pre-construction conferences. Arrange a schedule of progress meetings and other job conferences as required in consultation with the ENGINEER and notify those expected to attend in advance. Attend meetings and maintain and circulate copies of minutes thereof.
3. Serve as the ENGINEER's liaison with the CONTRACTOR, working principally through the CONTRACTOR's superintendent and assist said superintendent in understanding the intent of the Contract Documents. Assist the ENGINEER in serving as the OWNER's liaison with the CONTRACTOR when the CONTRACTOR's operations affect the OWNER's on-site operations.
4. As requested by the ENGINEER, assist in obtaining from the OWNER additional details or information, when required at the site for proper execution of the WORK.
5. Receive and record date of receipt of Shop Drawings and samples, receive samples which are furnished at the site by the CONTRACTOR and notify the ENGINEER of their availability for examination.
6. Conduct on-site observations of the WORK in progress to assist the ENGINEER in determining if the WORK is proceeding in accordance with the Contract Documents.
7. Report to the ENGINEER whenever the Inspector believes that any WORK is unsatisfactory, faulty, or defective or does not conform to the Contract Documents, or does not meet the requirements of any inspection, tests or approval required to be made or has been damaged prior to final payment; and advise the ENGINEER when the Inspector believes WORK should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection, or approval.
8. Verify that the tests, equipment, and systems startups and operating and maintenance instruction are conducted as required by the Contract Documents and in presence of the required personnel, and that the CONTRACTOR maintains adequate records thereof; observe, record and report to the ENGINEER appropriate details relative to the test procedures and start-ups.
9. Accompany visiting inspectors representing public or other agencies having jurisdiction over the WORK, record the outcome of these inspections, and report to the ENGINEER.
10. Transmit to the CONTRACTOR the ENGINEER's clarifications and interpretations of the Contract Documents.
11. Consider and evaluate the CONTRACTOR's suggestions for modifications in the Contract Documents and report them with recommendations to the ENGINEER.
12. Maintain at the job site orderly files for correspondence, reports of job conferences, Shop Drawings and sample submittals, reproductions of original Contract Documents including all addenda, Change Orders, field orders, additional Drawings issued

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subsequent to the execution of the contract, the ENGINEER's clarifications and interpretations of the Contract Documents, progress reports, and other related documents.

13. Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions, list all project visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of performing and observing test procedures. Send copies to the ENGINEER.
14. Record names, addresses, and telephone numbers of the CONTRACTOR, Subcontractors, and major suppliers of materials and equipment.
15. Furnish the ENGINEER with periodic reports as required of progress of the WORK and the CONTRACTOR's compliance with the accepted progress schedule and schedule of CONTRACTOR submittals.
16. Consult with the ENGINEER in advance of scheduled major tests, inspections, or start of important phases of the WORK.
17. Report immediately to the ENGINEER upon the occurrence of any accident.
18. Review applications for payment with the CONTRACTOR for compliance with the established procedure for their submittal and forward them with recommendations to the ENGINEER, noting particularly their relation to the schedule of values, WORK completed, and materials and equipment delivered at the site but not incorporated in the WORK.
19. During the course of the WORK, verify that certificates, maintenance and operation manuals, and other data required to be assembled and furnished by the CONTRACTOR are applicable to the items actually installed; and deliver this material to the ENGINEER for its review and forwarding to the OWNER prior to final acceptance of the WORK.
20. Before the ENGINEER prepares a Certificate of Substantial Completion/Notice of Completion, as applicable, review the CONTRACTOR's punch list items requiring completion or correction and add any items that CONTRACTOR has omitted.
21. Conduct final inspection in the company of the ENGINEER, the OWNER, and the CONTRACTOR, and prepare a final punch list of items to be completed or corrected.
22. Verify that all items on the punch list have been completed or corrected and make recommendations to the ENGINEER concerning acceptance.

Limitations of Authority. Except upon written instruction of the ENGINEER, the Inspector:

1. Shall not authorize any deviation from the Contract Documents or approve any substitute material or equipment.
2. Shall not exceed limitations on the ENGINEER's authority as set forth in the Contract Documents.
3. Shall not undertake any of the responsibilities of the CONTRACTOR, Subcontractors or CONTRACTOR's superintendent, or expedite the WORK.
4. Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences, or procedures of construction unless such is specifically called for in the Contract Documents.
5. Shall not advise on or issue directions as to safety precautions and programs in connection with the WORK.

9.4 CLARIFICATIONS AND INTERPRETATIONS. The ENGINEER will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract

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Documents (in the form of Drawings or otherwise) as the ENGINEER may determine necessary, which shall be consistent with, or reasonably inferred from, the overall intent of the Contract Documents.

9.5 **AUTHORIZED VARIATIONS IN WORK.** The ENGINEER may authorize variations in the WORK from the requirements of the Contract Documents. These may be accomplished by a Field Order and will require the CONTRACTOR to perform the WORK involved in a manner that minimizes the impact to the WORK and the contract completion date. If the CONTRACTOR believes that a Field Order justifies an increase in the Contract Price or an extension of the Contract Time, the CONTRACTOR may make a claim therefor as provided in Article 11 or 12.

9.6 **REJECTING DEFECTIVE WORK.** The ENGINEER will have authority to reject WORK which the ENGINEER believes to be defective and will also have authority to require special inspection or testing of the WORK as provided in Paragraph 13.3G, whether or not the WORK is fabricated, installed, or completed.

9.7 **CONTRACTOR SUBMITTALS, CHANGE ORDERS, AND PAYMENTS**

A. In accordance with the procedures set forth in the General Requirements, the ENGINEER will review all CONTRACTOR submittals, including Shop Drawings, samples, substitutes, or "or equal" items, etc., in order to determine if the items covered by the submittals will, after installation or incorporation in the WORK, conform to the requirements of the Contract Documents and be compatible with the design concept of the completed project as a functioning whole as indicated by the Contract Documents. The ENGINEER's review will not extend to means, methods, techniques, sequences or procedures of construction or to safety precautions or programs incident thereto.

B. In connection with the ENGINEER's responsibilities as to Change Orders, see Articles 10, 11, and 12.

C. In connection with the ENGINEER's responsibilities in respect of Applications for Payment, see Article 14.

9.8 **DECISIONS ON DISPUTES**

A. The ENGINEER will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the WORK thereunder. Claims, disputes, and other matters relating to the acceptability of the WORK; the interpretation of the requirements of the Contract Documents pertaining to the performance of the WORK; and those claims under Articles 11 and 12 in respect to changes in the Contract Price or Contract Time will be referred initially to the ENGINEER in writing with a request for formal decision in accordance with this paragraph, which the ENGINEER will render in writing within 30 days of receipt of the request. Written notice of each such claim, dispute, and other matter will be delivered by the CONTRACTOR to the ENGINEER promptly (but in no event later than 30 days) after the occurrence of the event giving rise thereto. Written supporting data will be submitted to the ENGINEER within 60 days after such occurrence unless the ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim.

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- B. The rendering of a decision by the ENGINEER with respect to any such claim, dispute, or other matter (except any which have been waived by the making or acceptance of final payment as provided in Paragraph 14.12) will be a condition precedent to any exercise by the OWNER or the CONTRACTOR of such rights or remedies as either may otherwise have under the Contract Documents or by Law or Regulations in respect of any such claim, dispute, or other matter.

### **9.9 LIMITATION ON ENGINEER'S RESPONSIBILITIES**

- A. Neither the ENGINEER's authority to act under this Article or other provisions of the Contract Documents nor any decision made by the ENGINEER in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the ENGINEER to the CONTRACTOR, any Subcontractor, any Supplier, any surety for any of them, or any other person or organization performing any of the WORK.
- B. Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as reviewed," "as approved," or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review, or judgment of the ENGINEER as to the WORK, it is intended that such requirement, direction, review, or judgment will be solely to evaluate the WORK for compliance with the requirements of the Contract Documents, and conformance with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents, unless there is a specific statement indicating otherwise. The use of any such term or adjective shall not be effective to assign to the 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 9.9C or 9.9D.
- C. The ENGINEER will not supervise, direct, control, or have authority over or be responsible for the CONTRACTOR's means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of the CONTRACTOR to comply with Laws and Regulations, applicable to the performance of the WORK. The ENGINEER will not be responsible for the CONTRACTOR's failure to perform the WORK in accordance with the Contract Documents.
- D. The ENGINEER will not be responsible for the acts or omissions of the CONTRACTOR nor of any Subcontractor, supplier, or any other person or organization performing any of the WORK.

## **ARTICLE 10 CHANGES IN THE WORK**

### **10.1 GENERAL**

- A. Without invalidating the Agreement and without notice to any surety, the OWNER may at any time or from time to time, order additions, deletions, or revisions in the WORK; these will be authorized by a written Field Order and/or a Change Order issued by the ENGINEER.

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- B. If the CONTRACTOR believes that it is entitled to an increase or decrease in the Contract Price, or an extension or shortening in the Contract Time as the result of a Field Order, a claim may be made as provided in Articles 11 and 12.
- C. If the OWNER and CONTRACTOR agree on the value of any work, or the amount of Contract Time that should be allowed as a result of a Field Order, upon receiving written notice from the ENGINEER, the CONTRACTOR shall proceed so as to minimize the impact on and delays to the work pending the issuance of a Change Order.
- D. If the OWNER and the CONTRACTOR are unable to agree as to the extent, if any, of an increase or decrease in the Contract Price or an extension or shortening of the Contract Time that should be allowed as a result of a Field Order, the ENGINEER can direct the CONTRACTOR to proceed on the basis of Time and Materials so as to minimize the impact on and delays to WORK, and a claim may be made therefor as provided in Articles 11 and 12.
- E. The CONTRACTOR shall not be entitled to an increase in the Contract Price nor an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified, supplemented by Change Order, except in the case of an emergency and except in the case of uncovering work as provided in Paragraph 13.3G.
- F. The OWNER and the CONTRACTOR shall execute appropriate Change Orders covering:
  - 1. changes in the WORK which are ordered by the OWNER pursuant to Paragraph 10.1A;
  - 2. changes required because of acceptance of Defective WORK under Paragraph 13.7;
  - 3. changes in the Contract Price or Contract Time which are agreed to by the parties; or
  - 4. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by the ENGINEER pursuant to Paragraph 9.8.
- G. If notice of any change is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be the CONTRACTOR's responsibility, and the amount of each applicable Bond shall be adjusted accordingly.

### 10.2 ALLOWABLE QUANTITY VARIATIONS

- A. In the event of an increase or decrease in Bid item quantity of a unit price contract, the total amount of WORK actually done or materials or equipment furnished shall be paid for according to the unit price established for such WORK under the Contract Documents, wherever such unit price has been established; provided, that an adjustment in the Contract Price may be made for changes which result in an increase or decrease in excess of 25% of the estimated quantity of any major item of the WORK. Major Item is defined as any bid item amount that is ten percent (10%) or more of the total contract amount.
- B. In the event a part of the WORK is to be entirely eliminated and no lump sum or unit price is named in the Contract Documents to cover such eliminated work, the price of the eliminated work shall be agreed upon in writing by the OWNER and the CONTRACTOR. If the OWNER and the CONTRACTOR fail to agree upon the price of the eliminated work, said price shall be determined in accordance with the provisions of Article 11.

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### **ARTICLE 11 CHANGE OF CONTRACT PRICE**

#### **11.1 GENERAL**

- A. The Contract Price constitutes the total compensation payable to the CONTRACTOR for performing the WORK. All duties, responsibilities, and obligations assigned to or undertaken by the CONTRACTOR to complete the WORK shall be at its expense without change in the Contract Price.
- B. The Contract Price may only be changed by a Change Order. Any claim for an increase in the Contract Price shall be based on written notice delivered by the CONTRACTOR to the ENGINEER promptly (but in no event later than 7 days) after the start of the occurrence or the event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within 14 days after such occurrence (unless the ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the CONTRACTOR's written statement that the amount claimed covers all known amounts (direct, indirect, and consequential) to which the CONTRACTOR is entitled as a result of said occurrence or event. All claims for adjustment in the Contract Price shall be determined by the ENGINEER in accordance with Paragraph 9.8A if the OWNER and the CONTRACTOR cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this Paragraph 11.1B.
- C. The value of any WORK covered by a Change Order or of any claim for an increase or decrease in the Contract Price shall be determined in one of the following ways:
  - 1. Where the WORK involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.
  - 2. By mutual acceptance of a lump sum, which may include an allowance for overhead and profit not necessarily in accordance with Paragraph 11.4.
  - 3. On the basis of the cost of WORK (determined as provided in Paragraphs 11.3) plus a CONTRACTOR's fee for overhead and profit (determined as provided in Paragraph 11.4).

11.2 **COSTS RELATING TO WEATHER.** The CONTRACTOR shall have no claims against the OWNER for damages for any injury to WORK, materials, or equipment, resulting from the action of the elements. If, however, in the opinion of the ENGINEER, the CONTRACTOR has made all reasonable efforts to protect the materials, equipment and work, the CONTRACTOR may be granted a reasonable extension of Contract Time to make proper repairs, renewals, and replacements of the work, materials, or equipment.

#### **11.3 COST OF WORK (BASED ON TIME AND MATERIALS)**

- A. General. The term "cost of work" means the sum of all costs necessarily incurred and paid by the CONTRACTOR for labor, materials, and equipment in the proper performance of extra work. Except as otherwise may be agreed to in writing by the OWNER, such costs shall be in amounts no higher than those prevailing in the locality of the Project; shall include only the

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following items, and shall not include any of the costs itemized in Paragraph 11.5 EXCLUDED COSTS.

- B. Labor. The costs of labor will be the actual cost for wages prevailing for each craft or type of workers performing the extra work at the time the extra work is done, plus employer payments of payroll taxes, worker's compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. Labor costs for equipment operators and helpers shall be paid only when such costs are not included in the invoice for equipment rental. The labor costs for forepersons shall be proportioned to all of their assigned work and only that applicable to extra work shall be paid. Non-direct labor costs including superintendence shall be considered part of the mark-up set out in paragraph 11.4.
- C. Materials. The cost of materials reported shall be at invoice or lowest current price at which materials are locally available and delivered to the job in the quantities involved, plus the cost of freight, delivery and storage, subject to the following:
  - 1. Trade discounts available to the purchaser shall be credited to the OWNER notwithstanding the fact that such discounts may not have been taken by the CONTRACTOR.
  - 2. For materials secured by other than a direct purchase and direct billing to the purchaser, the cost shall be deemed to be the price paid to the actual supplier as determined by the ENGINEER. Mark-up except for actual costs incurred in the handling of such materials will not be allowed.
  - 3. Payment for materials from sources owned wholly or in part by the purchaser shall not exceed the price paid by the purchaser for similar materials from said sources on extra work items or the current wholesale price for such materials delivered to the work site, whichever price is lower.
  - 4. If in the opinion of the ENGINEER the cost of material is excessive, or the CONTRACTOR does not furnish satisfactory evidence of the cost of such material, then the cost shall be deemed to be the lowest current wholesale price for the quantity concerned delivered to the work site less trade discount. The OWNER reserves the right to furnish materials for the extra work and no claim shall be allowed by the CONTRACTOR for costs and profit on such materials.
- D. Equipment. The CONTRACTOR will be paid for the use of equipment at the rental rate listed for such equipment specified in the Supplementary General Conditions. Such rental rate will be used to compute payments for equipment whether the equipment is under the CONTRACTOR's control through direct ownership, leasing, renting, or another method of acquisition. The rental rate to be applied for use of each item of equipment shall be the rate resulting in the least total cost to the OWNER for the total period of use. If it is deemed necessary by the CONTRACTOR to use equipment not listed in the publication specified in the Supplementary General Conditions, an equitable rental rate for the equipment will be established by the ENGINEER. The CONTRACTOR may furnish cost data which might assist the ENGINEER in the establishment of the rental rate.
  - 1. All equipment shall, in the opinion of the ENGINEER, be in good working condition and suitable for the purpose for which the equipment is to be used.

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2. Before construction equipment is used on the extra work, the CONTRACTOR shall plainly stencil or stamp an identifying number thereon at a conspicuous location, and shall furnish to the ENGINEER, in duplicate, a description of the equipment and its identifying number.
  3. Unless otherwise specified, manufacturer's ratings and manufacturer approved modifications shall be used to classify equipment for the determination of applicable rental rates. Equipment which has no direct power unit shall be powered by a unit of at least the minimum rating recommended by the manufacturer.
  4. Individual pieces of equipment or tools having a replacement value of \$200 or less, whether or not consumed by use, shall be considered to be small tools and no payment will be made therefor.
  5. Rental time will not be allowed while equipment is inoperative due to breakdowns.
  6. Equipment Rental Rates. Unless otherwise agreed in writing, the CONTRACTOR will be paid for the use of equipment at the rental rate listed for such equipment specified in the current edition of the following reference publication: "Rental Rate Blue Book" as published by Dataquest (a company of the Dunn and Bradstreet Corporation), 1290 Ridder Park Drive, San Jose, CA 95131, telephone number (800) 227-8444.
- E. Equipment on the Work Site. The rental time to be paid for equipment on the work site shall be the time the equipment is in productive operation on the extra work being performed and, in addition, shall include the time required to move the equipment to the location of the extra work and return it to the original location or to another location requiring no more time than that required to return it to its original location; except, that moving time will not be paid if the equipment is used on other than the extra work, even though located at the site of the extra work. Loading and transporting costs will be allowed, in lieu of moving time, when the equipment is moved by means other than its own power, except that no payment will be made for loading and transporting costs when the equipment is used at the site of the extra work on other than the extra work. The following shall be used in computing the rental time of equipment on the work site.
1. When hourly rates are listed, any part of an hour less than 30 minutes of operation shall be considered to be 1/2-hour of operation, and any part of an hour in excess of 30 minutes will be considered one hour of operation.
  2. When daily rates are listed, any part of a day less than 4 hours operation shall be considered to be 1/2-day of operation. When owner-operated equipment is used to perform extra work to be paid for on a time and materials basis, the CONTRACTOR will be paid for the equipment and operator, as set forth in Paragraphs (3), (4), and (5), following.
  3. Payment for the equipment will be made in accordance with the provisions in Paragraph 11.3D, herein.
  4. Payment for the cost of labor and subsistence or travel allowance will be made at the rates paid by the CONTRACTOR to other workers operating similar equipment already on the work site, or in the absence of such labor, established by collective bargaining agreements for the type of worker and location of the extra work, whether or not the operator is actually covered by such an agreement. A labor surcharge will be added to the cost of labor described herein in accordance with the provisions of Paragraph 11.3B, herein, which surcharge shall constitute full compensation for payments imposed by state and federal laws and all other payments made to or on behalf of workers other than actual wages.

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5. To the direct cost of equipment rental and labor, computed as provided herein, will be added the allowances for equipment rental and labor as provided in Paragraph 11.4, herein.
- F. Specialty Work. Specialty work is defined as that work characterized by extraordinary complexity, sophistication, or innovation or a combination of the foregoing attributes which are unique to the construction industry. The following shall apply in making estimates for payment for specialty work:
  1. Any bid item of WORK to be classified as Specialty Work shall be listed as such in the Supplementary General Conditions. Specialty work shall be performed by an entity especially skilled in the work to be performed. After validation of invoices and determination of market values by the ENGINEER, invoices for specialty work based upon the current fair market value thereof may be accepted without complete itemization of labor, material, and equipment rental costs.
  2. When the CONTRACTOR is required to perform work necessitating special fabrication or machining process in a fabrication or a machine shop facility away from the job site, the charges for that portion of the work performed at the off-site facility may, by agreement, be accepted as specialty work and accordingly, the invoices for the work may be accepted without detailed itemization.
  3. All invoices for specialty work will be adjusted by deducting all trade discounts offered or available, whether the discounts were taken or not. In lieu of the allowances for overhead and profit specified in Paragraph 11.4, herein, an allowance of 5 percent will be added to invoices for specialty work.
- G. Sureties. All work performed hereunder shall be subject to all of the provisions of the Contract Documents and the CONTRACTOR's sureties shall be bound with reference thereto as under the original Agreement. Copies of all amendments to surety bonds or supplemental surety bonds shall be submitted to the OWNER for review prior to the performance of any work hereunder.

### 11.4 CONTRACTOR'S FEE

- A. Extra work ordered on the basis of time and materials will be paid for at the actual necessary cost as determined by the ENGINEER, plus allowances for overhead and profit. The allowance for overhead and profit shall include full compensation for superintendence, bond and insurance premiums, taxes, field office expense, extended overhead, home office overhead, and all other items of expense or cost not included in the cost of labor, materials, or equipment provided for under Paragraph 11.3. The allowance for overhead and profit will be made in accordance with the following schedule:

#### Actual Overhead and Profit Allowance

Labor.....	15 percent
Materials .....	10 percent
Equipment.....	10 percent

To the sum of the costs and mark-ups provided for in this Article, one percent shall be added as compensation for bonding.

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- B. It is understood that labor, materials, and equipment may be furnished by the CONTRACTOR or by the Subcontractor on behalf of the CONTRACTOR. When all or any part of the extra work is performed by a Subcontractor, the allowance specified herein shall be applied to the labor, materials, and equipment costs of the Subcontractor, to which the CONTRACTOR may add 5 percent of the Subcontractor's total cost for the extra work. Regardless of the number of hierarchical tiers of Subcontractors, the 5 percent increase above the Subcontractor's total cost which includes the allowances for overhead and profit specified herein may be applied one time only.

11.5 EXCLUDED COSTS. The term "Cost of the Work" shall not include any of the following:

- A. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, estimators, attorneys' auditors, accountants, purchasing and contracting agents, expenditures, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the work, or not specifically covered by paragraph 11.3, all of which are to be considered administrative costs covered by the CONTRACTOR's fee.
- B. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.
- C. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the WORK and charges against CONTRACTOR for delinquent payments.
- D. Cost of premiums for all bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by paragraph 11.4 above).
- E. 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.
- F. Other overhead or general expense costs of any kind and the cost of any item not specifically and expressly included in paragraph 11.4.

## **ARTICLE 12 CHANGE OF CONTRACT TIME**

### **12.1 GENERAL**

- A. The Contract Time may only be changed by a Change Order. Any claim for an extension of the Contract Time (or Milestones) shall be based on written notice delivered by the CONTRACTOR to the ENGINEER promptly (but in no event later than 30 days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within 60 days after such occurrence (unless the ENGINEER allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the CONTRACTOR's written statement that the adjustment claimed is the entire adjustment to which the

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CONTRACTOR has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Time shall be determined by the ENGINEER in accordance with Paragraph 9.8 if the OWNER and the CONTRACTOR cannot otherwise agree. No claim for an adjustment in the Contract Time will be valid if not submitted in accordance with the requirements of this Paragraph 12.1A. An increase in Contract Time does not mean that the Contractor is due an increase in Contract Price. Only compensable time extensions will result in an increase in Contract Price.

- B. All time limits stated in the Contract Documents are of the essence of the Agreement.
- C. Where CONTRACTOR is prevented from completing any part of the WORK within the Contract Times (or Milestones) due to delay beyond the control of CONTRACTOR, the Contract Times (or Milestones) will be extended in an amount equal to the time lost on the critical path of the project due to such delay if a claim is made therefor as provided in paragraph 12.1. 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, unprecedented weather conditions or acts of God. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of CONTRACTOR.
- D. Where CONTRACTOR is prevented from completing any part of the WORK within the Contract Times (or Milestones) due to delay beyond the control of both OWNER and CONTRACTOR, an extension of the Contract Times (or Milestones) in an amount equal to the time lost on the critical path of the project due to such delay shall be CONTRACTOR's sole and exclusive remedy for such delay. In no event shall the OWNER be liable to CONTRACTOR, any Subcontractor, any Supplier, or any other person or organization, or to any surety for or employee or agent of any of them, for damages arising out of or resulting from (i) delays caused by or within the control of CONTRACTOR, or (ii) delays beyond the control of both parties including but not limited to fires, floods, epidemics abnormal weather conditions, acts of God or acts or neglect by utility owners or other contractors performing other work as contemplated by Article 7.

- 12.2 EXTENSIONS OF TIME FOR DELAY DUE TO WEATHER. Contract Time may be extended by the ENGINEER because of delays in completion of the WORK due to unusually severe weather, provided that the CONTRACTOR shall, within 10 days of the beginning of any such delay, notify the ENGINEER in writing of the cause of delay and request an extension of Contract Time. The ENGINEER will ascertain the facts and the extent of the delay and extend the time for completing the work when, in the ENGINEER's judgment, the findings of fact justify such an extension. Unprecedented, abnormal, or unusually severe weather will be defined as an event, or events, with a greater than 50-year recurrence interval, as determined by the National Weather Service, or equivalent State or Federal agency

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

- 13.1 WARRANTY AND GUARANTEE. The CONTRACTOR warrants and guarantees to the OWNER and the ENGINEER that all work will be in accordance with the Contract Documents and will not be defective. Prompt notice of defects known to the OWNER or ENGINEER shall be given to the

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CONTRACTOR. All defective work, whether or not in place, may be rejected, corrected, or accepted as provided in this Article 13.

- 13.2 ACCESS TO WORK. OWNER, ENGINEER, their Consultants, sub-consultants, other representatives and personnel of OWNER, independent testing laboratories and governmental agencies with jurisdictional interests will have access to the WORK at reasonable times for their observation, inspecting and testing. CONTRACTOR shall provide them proper and safe conditions for such access and advise them of CONTRACTOR's site safety procedures and programs so that they may comply therewith as applicable.

### **13.3 TESTS AND INSPECTIONS**

- A. The CONTRACTOR shall give the 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. If Laws or Regulations of any public body having jurisdiction other than the OWNER require any WORK to specifically be inspected, tested, or approved, the CONTRACTOR shall pay all costs in connection therewith. The CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with the OWNER's or the ENGINEER's acceptance of a Supplier of materials or equipment proposed as a substitution or (or-equal) to be incorporated in the WORK, or of materials or equipment submitted for review prior to the CONTRACTOR's purchase thereof for incorporation in the WORK. The cost of all inspections, tests, and approvals in addition to the above which are required by the Contract Documents shall be paid by the OWNER (unless otherwise specified).
- C. The ENGINEER will make, or have made, such inspections and tests as the ENGINEER deems necessary to see that the WORK is being accomplished in accordance with the requirements of the Contract Documents. Unless otherwise specified in the Supplementary General Conditions, the cost of such inspection and testing will be borne by the OWNER. In the event such inspections or tests reveal non-compliance with the requirements of the Contract Documents, the CONTRACTOR shall bear the cost of corrective measures deemed necessary by the ENGINEER, as well as the cost of subsequent reinspection and retesting. Neither observations by the ENGINEER nor inspections, tests, or approvals by others shall relieve the CONTRACTOR from the CONTRACTOR's obligation to perform the WORK in accordance with the Contract Documents.
- D. All inspections, tests, or approvals other than those required by Laws or Regulations of any public body having jurisdiction shall be performed by organizations acceptable to the ENGINEER and the CONTRACTOR.
- E. If any WORK (including the work of others) that is to be inspected, tested, or approved is covered without written concurrence of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for observation. Such uncovering shall be at the CONTRACTOR's expense unless the CONTRACTOR has given the ENGINEER timely notice of the CONTRACTOR's intention to perform such test or to cover the same and the ENGINEER has not acted with reasonable promptness in response to such notice.

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- F. If any WORK is covered contrary to the written request of the ENGINEER, it must, if requested by the ENGINEER, be uncovered for the ENGINEER's observation and recovered at the CONTRACTOR's expense.
  - G. If the ENGINEER considers it necessary or advisable that covered WORK be observed by the ENGINEER or inspected or tested by others, the CONTRACTOR, at the ENGINEER's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as the ENGINEER may require, that portion of the WORK in question, furnishing all necessary labor, material, and equipment. If it is found that such WORK is defective, the CONTRACTOR shall bear all direct, indirect, and consequential costs and damages of such uncovering, exposure, observation, inspection, and testing and of satisfactory reconstruction, including but not limited to fees and charges of engineers, attorneys, and other professionals. However, if such WORK is not found to be defective, the CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing, and reconstruction; and, if the parties are unable to agree as to the amount or extent thereof, the CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.
- 13.4 OWNER MAY STOP THE WORK. If the WORK is defective, or the CONTRACTOR fails to perform work in such a way that the completed WORK will conform to the Contract Documents, the OWNER may order the CONTRACTOR to stop the WORK, or any portion thereof, until the cause for such order has been eliminated; however, this right of the OWNER to stop the WORK shall not give rise to any duty on the part of the OWNER to exercise this right for the benefit of the CONTRACTOR or any other party.
- 13.5 CORRECTION OR REMOVAL OF DEFECTIVE WORK. If required by the ENGINEER, the CONTRACTOR shall promptly, either correct all defective work, whether or not fabricated, installed, or completed, or, if the WORK has been rejected by the ENGINEER, remove it from the site and replace it with non-defective work. The CONTRACTOR shall bear all direct, indirect and consequential costs and damages of such correction or removal, including but not limited to fees and charges of engineers, attorneys, and other professionals made necessary thereby.
- 13.6 ONE YEAR CORRECTION PERIOD
- A. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or 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, the CONTRACTOR shall promptly, without cost to the OWNER and in accordance with OWNER's written notification, (i) correct such Defective WORK, or, if it has been rejected by the OWNER, remove it from the site and replace it with non-defective work, and (ii) satisfactorily correct or remove and replace any damage to other work of others resulting therefrom. If the CONTRACTOR does not promptly comply with such notification, or in an emergency where delay would cause serious risk of loss or damage, the OWNER may have the Defective WORK corrected or the rejected WORK removed and replaced, and all direct, indirect, and consequential costs and damages of such removal and replacement including but not limited to fees and charges of engineers, attorneys and other professionals will be paid by the CONTRACTOR.

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- B. Where Defective WORK (and damage to other WORK resulting therefrom) has been corrected, removed or replaced under this paragraph 13.6, 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.
- 13.7 ACCEPTANCE OF DEFECTIVE WORK. If, instead of requiring correction or removal and replacement of defective work, the OWNER prefers to accept the WORK, the OWNER may do so. The CONTRACTOR shall bear all direct, indirect, and consequential costs attributable to the OWNER's evaluation of and determination to accept such defective work. If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the WORK, and the OWNER shall be entitled to an appropriate decrease in the Contract Price.

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

- 14.1 SCHEDULE OF VALUES (LUMP SUM PRICE BREAKDOWN). The schedule of values or lump sum price breakdown established as provided in the General Requirements shall serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to the ENGINEER.
- 14.2 UNIT PRICE BID SCHEDULE. Progress payments on account of Unit Price work will be based on the number of units completed.
- 14.3 APPLICATION FOR PROGRESS PAYMENT
- A. Unless otherwise prescribed by law, on the 25th of each month, the CONTRACTOR shall submit to the ENGINEER for review, an Application for Payment filled out and signed by the 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.
- B. The Application for Payment shall identify, as a sub-total, the amount of the CONTRACTOR'S Total Earnings to Date, plus the Value of Materials Stored at the Site which have not yet been incorporated in the WORK, and less a deductive adjustment for materials installed which were not previously incorporated in the WORK, but for which payment was allowed under the provisions for payment for Materials Stored at the Site, but not yet incorporated in the WORK.
- C. The Net Payment Due the CONTRACTOR shall be the above-mentioned subtotal from which shall be deducted the total amount of all previous payments made to the CONTRACTOR. Progress payments will be paid in full in accordance with Article 14 of the General Conditions until 90% of the Contract Price has been paid. The remaining 10% of the Contract Price amount may be withheld until:
1. final inspection has been made;
  2. completion of the Project; and
  3. acceptance of the Project by the OWNER.
- D. The Value of Materials Stored at the Site shall be an amount equal to the specified percent of the value of such materials as set forth in the Supplementary General Conditions. Said

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amount shall be based upon the value of all acceptable materials and equipment not incorporated in the WORK but delivered and suitably stored at the site or at another location agreed to in writing; provided, each such individual item has a value of more than \$5,000.00 and will become a permanent part of the WORK. The Application for Payment shall also be accompanied by an invoice (including shipping), a certification that the materials meet the applicable contract specifications, and any evidence required by the OWNER that the materials and equipment are covered by appropriate property insurance and other arrangements to protect the OWNER's interest therein, all of which will be satisfactory to the OWNER. Payment for materials will not constitute final acceptance. It shall be the CONTRACTOR's responsibility to protect the material from damage, theft, loss, or peril while in storage. Unless otherwise prescribed by law, the Value of Materials Stored at the Site shall be paid at the invoice amount up to a maximum of 85% of the Contract Price for those items.

14.4 CONTRACTOR'S WARRANTY OF TITLE. The CONTRACTOR warrants and guarantees that title to all work, materials, and equipment covered by an Application for Payment, whether incorporated in the WORK or not, will pass to the OWNER no later than the time of payment free and clear of all liens.

### 14.5 REVIEW OF APPLICATIONS FOR PROGRESS PAYMENT

- A. The ENGINEER will, within 7 days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to the OWNER, or return the Application to the CONTRACTOR indicating in writing the ENGINEER's reasons for refusing to recommend payment. In the later case, the CONTRACTOR may make the necessary corrections and resubmit the Application. If the ENGINEER still disagrees with a portion of the Application, it will submit the Application recommending the undisputed portion of the Application to the OWNER for payment and provide reasons for recommending non-payment of the disputed amount. Thirty days after presentation of the Application for Payment with the ENGINEER's recommendation, the amount recommended will (subject to the provisions of Paragraph 14.5B) become due and when due will be paid by the OWNER to the CONTRACTOR.
- B. The OWNER may refuse to make payment of the full amount recommended by the ENGINEER because claims have been made against the OWNER on account of the CONTRACTOR's performance of the WORK or Liens have been filed in connection with the WORK or there are other items entitling the OWNER to a credit against the amount recommended, but the OWNER must give the CONTRACTOR written notice within 7 days (with a copy to the ENGINEER) stating the reasons for such action.

### 14.6 PARTIAL UTILIZATION

- A. The OWNER shall have the right to utilize or place into service any item of equipment or other usable portion of the WORK prior to completion of the WORK. Whenever the OWNER plans to exercise said right, the CONTRACTOR will be notified in writing by the OWNER, identifying the specific portion or portions of the WORK to be so utilized or otherwise placed into service.

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- B. It shall be understood by the CONTRACTOR that until such written notification is issued, all responsibility for care and maintenance of all of the WORK shall be borne by the CONTRACTOR. Upon issuance of said written notice of partial utilization, the OWNER will accept responsibility for the protection and maintenance of all such items or portions of the WORK described in the written notice.
  - C. The CONTRACTOR shall retain full responsibility for satisfactory completion of the WORK, regardless of whether a portion thereof has been partially utilized by the OWNER and the CONTRACTOR's one year correction period shall commence only after the date of Substantial Completion for the WORK.
- 14.7 **SUBSTANTIAL COMPLETION.** When the CONTRACTOR considers the WORK ready for its intended use the CONTRACTOR shall notify the OWNER and the ENGINEER in writing that the WORK is substantially complete. The CONTRACTOR will attach to this request a list of all work items that remain to be completed and a request that the ENGINEER prepare a Notice of Completion. Within a reasonable time thereafter, the OWNER, the CONTRACTOR, and the ENGINEER shall make an inspection of the WORK to determine the status of completion. If the ENGINEER does not consider the WORK substantially complete, or the list of remaining work items to be comprehensive, the ENGINEER will notify the CONTRACTOR in writing giving the reasons therefor. If the ENGINEER considers the WORK substantially complete, the ENGINEER will prepare and deliver to the OWNER, for its execution and recording, the Notice of Completion signed by the ENGINEER and CONTRACTOR, which shall fix the date of Substantial Completion.
- 14.8 **FINAL APPLICATION FOR PAYMENT.** After the CONTRACTOR has completed all of the remaining work items referred to in Paragraph 14.7 and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, record as-built documents (as provided in the General Requirements) and other documents, all as required by the Contract Documents, and after the ENGINEER has indicated that the WORK is acceptable, the CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all documentation called for in the Contract Documents, together with complete and legally effective releases or waivers (satisfactory to the OWNER) of all liens arising out of or filed in connection with the WORK.
- 14.9 **FINAL PAYMENT AND ACCEPTANCE**
- A. If, on the basis of the ENGINEER's observation of the WORK during construction and final inspection, and the ENGINEER's review of the final Application for Payment and accompanying documentation, all as required by the Contract Documents, the ENGINEER is satisfied that the WORK has been completed and the CONTRACTOR's other obligations under the Contract Documents have been fulfilled, the ENGINEER will, within 14 days after receipt of the final Application for Payment, indicate in writing the ENGINEER's recommendation of payment and present the Application to the OWNER for payment.
  - B. After acceptance of the WORK by the OWNER's governing body, the OWNER will make final payment to the CONTRACTOR of the amount remaining after deducting all prior payments and all amounts to be kept or retained under the provisions of the Contract Documents, including the following items:
    - 1. Liquidated damages, as applicable.

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2. Two times the value of outstanding items of correction work or punch list items yet uncompleted or uncorrected, as applicable. All such work shall be completed or corrected to the satisfaction of the OWNER within the time stated on the Notice of Completion, otherwise the CONTRACTOR does hereby waive any and all claims to all monies withheld by the OWNER to cover the value of all such uncompleted or uncorrected items.

### **14.10 RELEASE OF RETAINAGE AND OTHER DEDUCTIONS**

- A. After executing the necessary documents to initiate the lien period, and not more than 45 days thereafter (based on a 30-day lien filing period and 15-day processing time), the OWNER will release to the CONTRACTOR the retainage funds withheld pursuant to the Agreement, less any deductions to cover pending claims against the OWNER pursuant to Paragraph 14.5B.
- B. After filing of the necessary documents to initiate the lien period, the CONTRACTOR shall have 30 days to complete any outstanding items of correction work remaining to be completed or corrected as listed on a final punch list made a part of the Notice of Completion. Upon expiration of the 45 days, referred to in Paragraph 14.10A, the amounts withheld pursuant to the provisions of Paragraph 14.9B herein, for all remaining work items will be returned to the CONTRACTOR; provided, that said work has been completed or corrected to the satisfaction of the OWNER within said 30 days. Otherwise, the CONTRACTOR does hereby waive any and all claims for all monies withheld by the OWNER under the Contract to cover 2 times the value of such remaining uncompleted or uncorrected items.

**14.11 CONTRACTOR'S CONTINUING OBLIGATION.** The CONTRACTOR's obligation to perform and complete the WORK in accordance with the Contract Documents shall be absolute. Neither recommendation of any progress or final payment by the ENGINEER, nor the issuance of a Notice of Completion, nor any payment by the OWNER to the CONTRACTOR under the Contract Documents, nor any use or occupancy of the WORK or any part thereof by the OWNER, nor any act of acceptance by the OWNER nor any failure to do so, nor any review of a Shop Drawing or sample submittal, will constitute an acceptance of work not in accordance with the Contract Documents or a release of the CONTRACTOR's obligation to perform the WORK in accordance with the Contract Documents.

**14.12 FINAL PAYMENT TERMINATES LIABILITY OF OWNER.** Final payment is defined as the last progress payment made to the CONTRACTOR for earned funds, less monies withheld as applicable, pursuant to Paragraph 14.10A. The acceptance by the CONTRACTOR of the final payment referred to in Paragraph 14.9 herein, shall be a release of the OWNER and its agents from all claims of liability to the CONTRACTOR for anything done or furnished for, or relating to, the WORK or for any act of neglect of the OWNER or of any person relating to or affecting the WORK, except demands against the OWNER for the remainder, if any, of the amounts kept or retained under the provisions of Paragraph 14.9 herein; and excepting pending, unresolved claims filed prior to the date of the Notice of Completion.

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

**15.1 SUSPENSION OF WORK BY OWNER.** The OWNER, acting through the ENGINEER, may, at any time and without cause, suspend the WORK or any portion thereof for a period of not more than 90 days by notice in writing to the CONTRACTOR. The CONTRACTOR shall resume the WORK on receipt from the ENGINEER of a notice of resumption of work. The CONTRACTOR shall be allowed

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an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if the CONTRACTOR makes an approved claim therefor as provided in Articles 11 and 12.

### **15.2 TERMINATION OF AGREEMENT BY OWNER (CONTRACTOR DEFAULT)**

- A. In the event of default by the CONTRACTOR, the OWNER may give 10 days written notice to the CONTRACTOR of OWNER's intent to terminate the Agreement and provide the CONTRACTOR an opportunity to remedy the conditions constituting the default. It shall be considered a default by the CONTRACTOR whenever CONTRACTOR shall: (1) declare bankruptcy, become insolvent, or assign its assets for the benefit of its creditors; (2) fail to provide materials or quality of work meeting the requirements of the Contract Documents; (3) disregard or violate provisions of the Contract Documents or ENGINEER's instructions; (4) fail to prosecute the WORK according to the approved progress schedule; or, (5) fail to provide a qualified superintendent, competent workers, or materials or equipment meeting the requirements of the Contract Documents. If the CONTRACTOR fails to remedy the conditions constituting default within the time allowed, the OWNER may then issue the Notice of Termination.
- B. In the event the Agreement is terminated in accordance with Paragraph 15.2A, herein, the OWNER may take possession of the WORK and may complete the WORK by whatever method or means the OWNER may select. The cost of completing the WORK shall be deducted from the balance which would have been due the CONTRACTOR had the Agreement not been terminated and the WORK completed in accordance with the Contract Documents. If such cost exceeds the balance which would have been due, the CONTRACTOR shall pay the excess amount to the OWNER. If such cost is less than the balance which would have been due, the CONTRACTOR shall not have claim to the difference.

### **15.3 TERMINATION OF AGREEMENT BY OWNER (FOR CONVENIENCE).** The OWNER may terminate the Agreement at any time if it is found that reasons beyond the control of either the OWNER or CONTRACTOR make it impossible or against the OWNER's interests to complete the WORK. In such a case, the CONTRACTOR shall have no claims against the OWNER except: (1) for the value of work performed up to the date the Agreement is terminated; and, (2) for the cost of materials and equipment on hand, in transit, or on definite commitment, as of the date the Agreement is terminated which would be needed in the WORK and which meet the requirements of the Contract Documents. The value of work performed and the cost of materials and equipment delivered to the site, as mentioned above, shall be determined by the ENGINEER in accordance with the procedure prescribed for the making of the final application for payment and payment under Paragraphs 14.8 and 14.9.

### **15.4 TERMINATION OF AGREEMENT BY CONTRACTOR.** The CONTRACTOR may terminate the Agreement upon 10 days written notice to the OWNER, whenever: 1) the WORK has been suspended under the provisions of Paragraph 15.1, herein, for more than 90 consecutive days through no fault or negligence of the CONTRACTOR, and notice to resume work or to terminate the Agreement has not been received from the OWNER within this time period; or, 2) the OWNER should fail to pay the CONTRACTOR any monies due him in accordance with the terms of the Contract Documents and within 60 days after presentation to the OWNER by the CONTRACTOR of a request therefor, unless within said 10-day period the OWNER shall have remedied the condition upon which the payment

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delay was based. In the event of such termination, the CONTRACTOR shall have no claims against the OWNER except for those claims specifically enumerated in Paragraph 15.3, herein, and as determined in accordance with the requirements of said paragraph.

### **ARTICLE 16 MISCELLANEOUS**

- 16.1 **GIVING NOTICE.** Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if 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 if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.
- 16.2 **RIGHTS IN AND USE OF MATERIALS FOUND ON THE WORK**
- A. The CONTRACTOR may use on the Project, with ENGINEER's approval, such stone, gravel, sand, or other material determined suitable by the ENGINEER, as may be found in the excavation. The CONTRACTOR will be paid for the excavation of such material at the corresponding contract unit price. No additional payment will be made for utilizing the material from excavation as borrow, or select borrow.
  - B. The CONTRACTOR shall replace, at its own expense, with other acceptable material, all of that portion of the excavated material so removed and used which was needed for use on the project. No charge for the materials so used will be made against the CONTRACTOR except that the CONTRACTOR shall be responsible for payment of any royalties required.
  - C. The CONTRACTOR shall not excavate or remove any material from within the Project location which is not within the grading limits, as indicated by the slope and grade lines, without written authorization from the ENGINEER.
  - D. In the event the CONTRACTOR has processed materials from OWNER-furnished sources in excess of the quantities required for performance of this contract, including any waste material produced as a by-product, the CBJ may retain possession of such materials without obligation to reimburse the CONTRACTOR for the cost of their production. When such materials are in a stockpile, the ENGINEER may require: That it remain in stockpile; the CONTRACTOR level such stockpile(s); or that the CONTRACTOR remove such materials and restore the premises to a satisfactory condition at the CONTRACTOR's expense. This provision shall not preclude the CBJ from arranging with the CONTRACTOR to produce material over and above the contract needs, payment for which shall be by written agreement between the CBJ and the CONTRACTOR.
  - E. Unless otherwise provided, the material from any existing old structure may be used temporarily by the CONTRACTOR in the erection of the new structure. Such material shall not be cut or otherwise damaged except with the approval of the ENGINEER.
- 16.3 **RIGHT TO AUDIT.** If the CONTRACTOR submits a claim to the OWNER for additional compensation, the OWNER shall have the right, as a condition to considering the claim, and as a basis for evaluation of the claim, and until the claim has been settled, to audit the CONTRACTOR's books to the extent they are relevant. This right shall include the right to examine books, records, documents, and other evidence and accounting procedures and practices, sufficient to discover and verify all direct

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and indirect costs of whatever nature claimed to have been incurred or anticipated to be incurred and for which the claim has been submitted. The right to audit shall include the right to inspect the CONTRACTOR's plants, or such parts thereof, as may be or have been engaged in the performance of the WORK. The CONTRACTOR further agrees that the right to audit encompasses all subcontracts and is binding upon Subcontractors. The rights to examine and inspect herein provided for shall be exercisable through such representatives as the OWNER deems desirable during the CONTRACTOR's normal business hours at the office of the CONTRACTOR. The CONTRACTOR shall make available to the OWNER for auditing, all relevant accounting records and documents, and other financial data, and upon request, shall submit true copies of requested records to the OWNER.

- 16.4 ARCHEOLOGICAL OR HISTORICAL DISCOVERIES. When the CONTRACTOR's operation encounters prehistoric artifacts, burials, remains of dwelling sites, paleontological remains, such as shell heaps, land or sea mammal bones or tusks, or other items of historical significance, the CONTRACTOR shall cease operations immediately and notify the ENGINEER. No artifacts or specimens shall be further disturbed or removed from the ground and no further operations shall be performed at the site until so directed. Should the ENGINEER order suspension of the CONTRACTOR's operations in order to protect an archaeological or historical finding, or order the CONTRACTOR to perform extra work, such order(s) shall be covered by an appropriate contract change document.
- 16.5 CONSTRUCTION OVER OR ADJACENT TO NAVIGABLE WATERS. All work over, on, or adjacent to navigable waters shall be so conducted that free navigation of the waterways will not be interfered with and the existing navigable depths will not be impaired, except as allowed by permit issued the U.S. Coast Guard and/or the U.S. Army Corps of Engineers, as applicable.
- 16.6 GRATUITY AND CONFLICT OF INTEREST. The CONTRACTOR agrees to not extend any loan, gratuity or gift of money of any form whatsoever to any employee or elected official of the OWNER, nor will the CONTRACTOR rent or purchase any equipment or materials from any employee or elected official of the OWNER, or to the best of the CONTRACTOR's knowledge, from any agent of any employee or elected official of the OWNER. Before final payment, the CONTRACTOR shall execute and furnish the OWNER an affidavit certifying that the CONTRACTOR has complied with the above provisions of the contract.
- 16.7 SUITS OF LAW CONCERNING THE WORK
- A. Should a suit of law be entered into, either by the CONTRACTOR (or the CONTRACTOR's surety) against the OWNER, or by the OWNER against the CONTRACTOR (or the CONTRACTOR's surety), the suit of law shall be tried in the First Judicial District of Alaska.
  - B. If one of the questions at issue is the satisfactory performance of the work by the CONTRACTOR and should the appropriate court of law judge the work of the CONTRACTOR to be unsatisfactory, then the CONTRACTOR (or the CONTRACTOR's surety) shall reimburse the OWNER for all legal and all other expenses (as may be allowed and set by the court) incurred by the OWNER because of the suit of the law and, further, it is agreed that the OWNER may deduct such expense from any sum or sums then, or any that become due the CONTRACTOR under the contract.

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### **16.8 CERTIFIED PAYROLLS**

- A. All CONTRACTORS or Subcontractor who perform work on a public construction contract for the OWNER shall file a certified payroll with the Alaska Department of Labor before Friday of each week that covers the preceding week (Section 14-2-4 ACLA 1949; am Section 4 ch 142 SLA 1972).
- B. In lieu of submitting the State payroll form, the CONTRACTOR's standard payroll form may be submitted, provided it contains the information required by AS 36.05.040 and a statement that the CONTRACTOR is complying with AS 36.10.010.
- C. A contractor or subcontractor, who performs work on public construction in the State, as defined by AS 36.95.010(3), shall pay not less than the current prevailing rate of wages as issued by the Alaska Department of Labor before the end of the pay period. (AS 36.05.010).

### **16.9 PREVAILING WAGE RATES**

- A. Wage rates for Laborers and Mechanics on Public Contracts, AS 36.05.070. The CONTRACTOR, or Subcontractors, shall pay all employees unconditionally and not less than once a week. Wages may not be less than those stated in Paragraph 16.8C, regardless of the contractual relationship between the CONTRACTOR or Subcontractors and laborers, mechanics, or field surveyors. The scale of wages to be paid shall be posted by the CONTRACTOR in a prominent, easily accessible place at the site of the WORK.
- B. Failure to Pay Agreed Wages, AS 36.05.080. 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 or wages less than the established rate, the OWNER may, by written notice, terminate the CONTRACTOR or Subcontractors right to proceed with the work. The OWNER may prosecute the work to completion by contract or otherwise, and the CONTRACTOR and sureties will be held liable to the OWNER for excess costs for completing the WORK. (Section 2 ch 52 SLA 1959).
- C. Listing Contractor's Who Violate Contracts, AS 36.05.090. In addition, a list giving the names of persons who have disregarded the rights of their employees shall be distributed to all departments of State government and all political subdivisions. No person appearing on this list, and no firm, corporation, partnership or association in which the person has an interest, may 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. (Section 3 ch 52 SLA 1959; am Section 9 ch 142 SLA).

16.10 EMPLOYMENT REFERENCE. Workers employed in the execution of the contract by the CONTRACTOR or by any Subcontractor under this contract shall not be required or permitted to labor more than 8 hours a day or 40 hours per week in violation of the provisions of the Alaska Wage and Hour Act, Section 23.10.060.

### **16.11 COST REDUCTION INCENTIVE**

- A. At any time within 45 days after the date of the Notice of Award, the CONTRACTOR may submit to the ENGINEER in writing, proposals for modifying the plans, specifications, or

## SECTION 00700 - GENERAL CONDITIONS

other requirements of this contract for the sole purpose of reducing the total cost of construction. The cost reduction proposal shall not impair in any manner the essential functions or characteristics of the project, including but not limited to, service life, economy of operation, ease of maintenance, desired appearance or design and safety standards.

- B. The cost reduction proposal shall contain the following information:
1. Description of both the existing contract requirements for performing the WORK and the proposed changes.
  2. An itemization of the contract requirements that must be changed if the proposal is adopted.
  3. A detailed estimate of the time required and the cost of performing the WORK under both the existing contract and the proposed change.
  4. A statement of the date by which the CONTRACTOR must receive the decision from the OWNER on the cost reduction proposal.
  5. The contract items of WORK effected by the proposed changes including any quantity variations.
  6. A description and estimate of costs the OWNER may incur in implementing the proposed changes, such as test and evaluation and operating and support costs.
  7. A prediction of any effects the proposed change would have on future operations and maintenance costs to the OWNER.
- C. The provisions of this section shall not be construed to require the OWNER to consider any cost reduction proposal which may be submitted; nor will the OWNER be liable to the CONTRACTOR for failure to accept or act upon any cost reduction proposal submitted, or for delays to the work attributable to the consideration or implementation of any such proposal.
- D. If a cost reduction proposal is similar to a change in the plans or specifications for the project under consideration by the OWNER at the time the proposal is submitted, the OWNER will not accept such proposal and reserves the right to make such changes without compensation to the CONTRACTOR under the provisions of this section.
- E. The CONTRACTOR shall continue to perform the work in accordance with the requirements of the contract until an executed Change Order incorporating the cost reduction proposal has been issued. If any executed Change Order has not been issued by the date upon which the CONTRACTOR's cost reduction proposal specifies that a decision should be made by the OWNER, in writing, the cost reduction proposal shall be considered rejected.
- F. The OWNER, shall be the sole judge of the acceptability of a cost reduction proposal and of the estimated net savings in Contract Time and construction costs resulting from the adoption of all or any part of such proposal. Should the CONTRACTOR disagree with OWNER's decision on the cost reduction proposal, there is no further consideration. The OWNER reserves the right to make final determination.
- G. If the CONTRACTOR's cost reduction proposal is accepted in whole or in part, such acceptance will be made by a contract Change Order, which specifically states that the change is executed pursuant to this cost reduction proposal section. Such Change Order shall incorporate the changes in the plans and specifications which are necessary to permit the cost

## **SECTION 00700 - GENERAL CONDITIONS**

reduction proposal or such part of it as has been accepted to be put into effect and shall include any conditions upon which the OWNER's approval is based, if such approval is conditional. The Change Order shall also describe the estimated net savings in the cost of performing the work attributable to the cost reduction proposal, and shall further provide that the contract cost be adjusted by crediting the OWNER with the estimated net savings amount.

- H. Acceptance of the cost reduction proposal and performance of the work does not extend the time of completion of the contract, unless specifically provided in the Change Order authorizing the use of the submitted proposal. Should the adoption of the cost reduction proposal result in a Contract Time savings, the total Contract Time shall be reduced by an amount equal to the time savings realized.
- I. The amount specified to the CONTRACTOR in the Change Order accepted in the cost reduction proposal shall constitute full compensation for the performance of WORK. No claims for additional costs as a result of the changes specified in the cost reduction proposal shall be allowed.
- J. The OWNER reserves the right to adopt and utilize any approved cost reduction proposal for general use on any contract administered when it is determined suitable for such application. Cost reduction proposals identical, similar, or previously submitted will not be accepted for consideration if acceptance and compensation has previously been approved. The OWNER reserves the right to use all or part of any cost reduction proposal without obligation or compensation of any kind to the CONTRACTOR.
- K. The CONTRACTOR shall bear the costs, if any, to revise all bonds and insurance requirements for the project, to include the cost reduction WORK.

**END OF SECTION**

## SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

**GENERAL.** These Supplementary General Conditions make additions, deletions, or revisions to the General Conditions as indicated herein. All provisions which are not so added, deleted, or revised remain in full force and effect. Terms used in these Supplementary General Conditions which are defined in the General Conditions have the meanings assigned to them in the General Conditions.

**SGC 1 DEFINITIONS.** *Remove* the definition for Contract Documents and *replace* with the following:

Contract Documents – The Table of Contents, Notice Inviting Bids, Instructions to Bidders, Bid Forms (including the Bid, Bid Schedule(s), Subcontractor Report, Bid Bond, and all required certificates and affidavits), Agreement, Performance Bond, Payment Bond, General Conditions, Supplementary General Conditions, Alaska Labor Standards, Reporting, and Prevailing Wage Rate Determination, Special Provisions, Standard Specifications, Technical Specifications, Drawings, Permits, and all Addenda, and Change Orders executed pursuant to the provisions of the Contract Documents.

**SGC 2.2 COPIES OF DOCUMENTS.** *Add* the following:

The OWNER shall furnish to the CONTRACTOR up to ten (10) copies of the Contract Documents which will include bound reduced Drawings and full size drawings. The CBJ Contracts Office shall contact the CONTRACTOR after issuance of Notice of Intent to Award to determine how many copies are needed. Additional quantities of the Contract Documents will be furnished at reproduction cost.

**SGC 3.2 ORDER OF PRECEDENCE OF CONTRACT DOCUMENTS.** *Remove* No. 12. Technical Specifications and No. 13. Drawings, and *add* the following:

12. Special Provisions Section
13. Standard Specifications for Civil Engineering Projects and Subdivision Improvements  
December 2003 Edition with current Errata Sheets.
14. Drawings.

**SGC 4.2 PHYSICAL CONDITIONS - SUBSURFACE AND EXISTING STRUCTURES.** *Add* the following:

C. In the preparation of the Contract Documents, the Engineer of Record has relied upon:

1. The following report of exploration and tests of subsurface conditions at the site of the WORK:
  - a. “Geotechnical Findings and Recommendations, Juneau Seawalk - Bridge to Gold Creek”, report prepared by Golder Associates Inc., Golder Project No. 133-95014, dated March 24, 2014.
  - b. “Gold Creek Seawalk Project, Basis of Coastal Engineering Design” Technical Memorandum by Coast and Harbor Engineering, dated February 24, 2014.
  - c. Copies of these reports may be examined at the office of the CBJ Engineer during regular business hours. As provided in paragraph 4.2 of the General Conditions and as identified and established above, the CONTRACTOR may rely upon the accuracy of the technical data contained in this report, which is incorporated into the Contract Documents by reference. However, the interpretation of such technical data, including any interpolation or extrapolation thereof, together with non-technical data,

## SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

interpretations and opinions contained in such reports or drawings, which are not a part of Contract Documents, or the completeness thereof, is the responsibility of the CONTRACTOR.

2. Field measurements and visual inspection of the existing structures and surface conditions.

**SGC - 4.6 USE OF THE CBJ/STATE LEMON CREEK GRAVEL PIT.** *Add* the following.

**The CBJ/State Lemon Creek Gravel Pit is available for this Project.**

**SGC - 4.6 USE OF THE CBJ/STATE LEMON CREEK GRAVEL PIT.**

Wherever the land use permits are referenced, *delete* and *replace with* the permit number USE2008-00061.

- *Delete* the last sentence of Paragraph A and *replace with* the following: “Contact Alan Steffert, CBJ Material Source Manager, at (907) 586-0481 for the current material rates.”
- *Delete* paragraph C., and *replace* with the following paragraph C.
  - C. CONTRACTORS deciding to use material from the CBJ/State pit shall provide an Individual Mining Plan prepared by a professional engineer registered in the State of Alaska. The Individual Mining Plan must be reviewed and approved by the CBJ, prior to commencing operations within the pit. CONTRACTORS shall also secure a Performance Bond to ensure compliance with contract provisions, including any Individual Mining Plan stipulations. The bond shall remain in full force and effect until a release is obtained from the CBJ. A \$10,000 cash processing restoration bond is required prior to screening or primary crushing operations.
- *Add* the following paragraph:
  - J. Contractors choosing to mine material from CBJ material sources are also subject to the conditions contained in each site’s Multi Sector General Permit for Stormwater Discharges associated with industrial activities (MSGP) and the Storm Water Pollution Prevention Plan (SWPPP).

*Add* the following SGC 4.7:

**SGC 4.7 USE OF CITY/STATE STABLER'S POINT ROCK QUARRY.** *Add* the following:

**The CBJ/State Stabler's Point Rock Quarry is available for this Project.**

*Add* the following SGC 4.7:

**SGC 4.7 USE OF CITY/STATE STABLER'S POINT ROCK QUARRY.**

- A. On City and Borough of Juneau construction projects, the CBJ may make unclassified material available to the CONTRACTOR, from the City/State Stabler's Point rock quarry, at a rate less than charged other customers. The CONTRACTOR is not required to use material from the CBJ/State quarry and the CBJ makes no guarantee as to the quantity or quality of material. Contact Alan Steffert, CBJ Material Source Manager, at (907) 586-0481 for the current material rates.

## SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

- B. The CONTRACTOR proposing to use material from the City/State quarry is required to be in good standing for all amounts owed to the CBJ, for previous gravel operations, prior to submitting a mining plan for approval. The CONTRACTOR using the quarry must comply with Conditional Use Permit USE2011-00017. Failure to meet these requirements, if so subject, shall be sufficient reason to deny use of the City/State Stabler's Point rock quarry as a rock source. To determine if your company is subject to these requirements, contact the CBJ Engineering Department, Rock Quarry Management, at (907) 586-0481.
- C. The CONTRACTOR deciding to use material from the CBJ/State Stabler's Point rock quarry shall provide an Individual Mining Plan prepared by a professional engineer registered in the State of Alaska. The Individual Mining Plan must be reviewed and approved by the CBJ, prior to commencing operations with the pit. The CONTRACTOR shall also secure a Performance Bond to ensure compliance with contract provisions, including any Individual Mining Plan stipulations. The bond shall remain in full force and effect until a release is obtained from the CBJ. A \$10,000.00 cash processing restoration bond is required prior to screening or primary crushing operations.
- D. The CONTRACTOR must submit an Individual Mining Plan that is in compliance with Conditional Use Permit No. USE 2011-00017 for rock extraction with the City/State Stabler's Point rock quarry. The CONTRACTOR must contact the CBJ Engineering Department for conditions for the extraction.
- E. The CONTRACTOR shall account for placement of materials removed from the quarry. The CBJ may require the CONTRACTOR to cross-check weight tickets, submit to an audit, or participate in other measures required by the CBJ to ensure accountability. Unprocessed overburden removed from the quarry will not be weighed. All other material mined will be measured by truck load or survey. The CONTRACTOR will be responsible for loading, screening and sorting their own material. Primary screening may be allowed in the quarry. Primary crushing may be allowed according to the conditions of the Conditional Use Permit No USE2011-00017.
- F. The rock quarry overhead charge shall be paid to the CBJ within 60 days after removing material from the quarry and prior to requesting and/or receiving final payment. Upon completion of the excavation the CONTRACTOR shall notify the CBJ, in writing, in sufficient time to perform a field-compliance examination prior to vacating the quarry. Any significant deviation from the stipulations of the Individual Mining Plan identified during the field inspection shall be corrected by the CONTRACTOR prior to release of the bond. A signed release from CBJ will be required prior to releasing the CONTRACTOR's bond.
- G. The City/State Stabler's Point rock quarry is a by-project operation. The hours of operation are stipulated in Conditional Use Permit No. USE2011-00017.
- H. All Contractors/Equipment Operators using the CBJ/State Stabler's Point rock quarry shall be in compliance with Federal Mine Safety and Health Administration regulations for quarry and gravel operations.
- I. Contractors choosing to mine material from CBJ material sources are also subject to the conditions contained in each site's Multi Sector General Permit for Stormwater Discharges associated with industrial activities (MSGP) and the Storm Water Pollution Prevention Plan (SWPPP).

**SGC 5.1 PERFORMANCE, PAYMENT, AND OTHER BONDS.** The Contractor shall furnish Performance and Payment Bonds in the amount of 100% of the Bid.

## SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

**SGC 5.2 INSURANCE AMOUNTS.** The limits of liability for the insurance required by Paragraph 5.2 of the General Conditions shall provide coverage for not less than the following amounts or greater where required by Laws and Regulations. All certificates of insurance supplied to the OWNER shall state that the OWNER is named as **“Additional Insured for any and all work performed for the City & Borough of Juneau.”** The Additional Insured requirement does not apply to Workers Compensation insurance. NOTE: This requirement has changed. The OWNER no longer requires certificates of insurance referencing project names and contract numbers.

*Delete* paragraph C and *Replace* with the following paragraph C:

C. The CONTRACTOR shall furnish the OWNER with certificates showing the type, amount, class of operations covered, effective dates and dates of expiration of policies. Failure of CBJ to demand such certificate or other evidence of full compliance with these insurance requirements or failure of CBJ to identify a deficiency from evidence that is provided shall not be construed as a waiver of the obligation of the Contractor to maintain the insurance required by this contract. The coverage afforded will not be cancelled, reduced in coverage, or renewal refused until at least 30 days' prior written notice has been given to the OWNER by the CONTRACTOR. . All such insurance required herein (except for Workers' Compensation and Employer's Liability) shall name the OWNER, its Consultants and subconsultants and their officers, directors, agents, and employees as "additional insureds" under the policies. The CONTRACTOR shall purchase and maintain the following insurance:

1. Workers' Compensation and Employer's Liability. This insurance shall protect the CONTRACTOR against all claims under applicable state workers' compensation laws. The CONTRACTOR shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a Workers' Compensation law. The CONTRACTOR shall require each Subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the CONTRACTOR's Workers' Compensation Insurance. In case any class of employees is not protected, under the Workers' Compensation Statute, the CONTRACTOR shall provide and shall cause each subcontractor to provide adequate employer's liability insurance for the protection of such of its employees as are not otherwise protected.
2. Workers' Compensation: (under Paragraph 5.2C.1 of the General Conditions) as in accordance with AS 23.30.045: (Additional Insured requirements not necessary for Workers' Compensation coverage.)
  1. State: Statutory
  2. Applicable Federal (e.g., Longshore): Statutory

Note: If the WORK called for in the Contract Documents involves work in or on any navigable waters, the CONTRACTOR shall provide Workers' Compensation coverage which shall include coverage under the Longshore and Harbor Workers' Compensation Act, the Jones Act, and any other coverage required under Federal or State laws pertaining to workers in or on navigable waters.

## SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

3. Employers Liability

Bodily Injury by Accident:	\$100,000.00	Each Accident
Bodily Injury by Disease:	\$100,000.00	Each Employee
Bodily Injury by Disease:	\$500,000.00	Policy Limit

  - a. CONTRACTOR agrees to waive all rights of subrogation against the OWNER for WORK performed under contract.
  - b. If CONTRACTOR directly utilizes labor outside of the State of Alaska in the prosecution of the WORK, "Other States" endorsement shall be required as a condition of the contract.

B. Commercial General Liability: (under Paragraph 5.2C.2 of the General Conditions):

- |    |                               |                |                  |
|----|-------------------------------|----------------|------------------|
| 1. | General Policy                | \$1,000,000.00 | Each Occurrence  |
|    |                               | \$2,000,000.00 | Annual Aggregate |
| 2. | Products/Completed Operations | \$1,000,000.00 | Each Occurrence  |
|    |                               | \$2,000,000.00 | Annual Aggregate |
| 3. | Personal Injury               | \$1,000,000.00 | Each Occurrence  |

NOTE: If Commercial General Liability policy includes "marine exclusions", CONTRACTOR shall carry a separate Marine General Liability policy with the limits noted above.

C. Commercial Automobile Liability: (under Paragraph 5.2C.3 of the General Conditions) including Owned, Hired, and Non-Owned Vehicles:

Combined Single Limit, Bodily Injury and Property Damage \$1,000,000.00

The CONTRACTOR shall require each Subcontractor similarly to provide Commercial Automobile Liability Insurance for all of the latter's employees to be engaged in such WORK unless such employees are covered by the protection afforded by the CONTRACTOR's Commercial Automobile Liability Insurance.

D. BUILDERS RISK is not required for this project.

E. Marine Protection and Indemnity \$1,000,000 per Accident or Occurrence including coverage for all crew members. Divers must have appropriate certifications. This coverage is required for any in-water work performed on a marine vessel. This coverage may be provided by the Prime Contractor or the Subcontractor, if the Subcontractor is contracted to do the in-water work on a marine vessel.

**SGC 6.5 CONCERNING SUBCONTRACTORS, SUPPLIERS, AND OTHERS. ~~Add~~ the following:**

The CONTRACTOR shall perform not less than 40% of the WORK with its own forces (i.e., without subcontracting). The 40% requirement shall be understood to mean that the CONTRACTOR shall perform, with its own organization, WORK amounting to at least 40% of the original contract amount. The 40% requirement will be calculated based upon the total of the subcontract amounts submitted for Contract Award, and any other information requested by the OWNER from the apparent low Bidder.

**SGC 6.5 CONCERNING SUBCONTRACTORS, SUPPLIERS, AND OTHERS, ~~Add~~ the following**

**SEAWALK – BRIDGE TO GOLD CREEK, SUPPLEMENTARY GENERAL CONDITIONS  
PHASE I**

**Page 00800-5**

**Contract No. E16-126**

## SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

paragraph:

- C. CONTRACTOR must pay Subcontractors and/or Suppliers within 30 days of receiving payment from the OWNER, if that payment was made for Work performed by the Subcontractor and/or materials received. Failure to pay Subcontractors within 30 days of receiving payment from which Subcontractor and/or Supplier is to be paid may result in the OWNER initiating debarment proceedings as prescribed in the City and Borough of Juneau Purchasing Code. *The 30 day City and Borough of Juneau requirement does not supersede AS 36.90.210.*

**SGC 6.6 PERMITS**, *Add* the following paragraph:

- D. Contractor is responsible for obtaining a Hot Works permit from the CBJ Permit Center, if performing work which requires such a permit. Work requiring a Hot Works Permit includes but is not limited to the following: cutting, welding, Thermit welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch-applied roof systems or any other similar activity.

**SGC 14.3 APPLICATION FOR PROGRESS PAYMENT.** Paragraph D.

- D. The Value of Materials Stored at the site shall be an amount equal to 85%.

**SGC 14.9 FINAL PAYMENT AND ACCEPTANCE.** *Add* the following paragraph:

- C. Prior to the final payment the CONTRACTOR shall contact the Alaska Department of Labor and Workforce Development (ADOL) and provide the OWNER with clearance from the ADOL for the CONTRACTOR and all Subcontractors that have worked on the Project. This clearance shall indicate that all Employment Security Taxes have been paid. A sample form for this purpose is at the end of this section. The CONTRACTOR shall also submit a "NOTICE OF COMPLETION OF PUBLIC WORKS" signed by ADOL.

**SGC 16.8 CERTIFIED PAYROLLS.** *Change* paragraph A. to read:

- A. All CONTRACTORS or Subcontractors who perform work on a public construction contract for the OWNER shall file a certified payroll with Alaska Department of Labor. See Section 00830 - Alaska Labor Standards, Reporting, and Prevailing Wage Rate Determination.

### **SGC 16.12 EQUAL EMPLOYMENT OPPORTUNITY (EEO)**

The CONTRACTOR may not discriminate against any employee or applicant for employment because of race, religion, color, national origin, age, disability, sex, marital status, changes in marital status, pregnancy or parenthood. The CONTRACTOR shall post a notice setting out the provisions of this paragraph in a conspicuous place available to employees and applicants for employment.

The CONTRACTOR and each Subcontractor shall state in all solicitations and advertisements for employees to work on this Project, that it is an Equal Opportunity Employer and that all qualified applicants will receive consideration for employment without regard to race, religion, color, national origin, age, disability, sex, marital status, changes in marital status, pregnancy or parenthood.

The CONTRACTOR shall include the provisions of this EEO article in every contract relating to this Project and shall require the inclusion of these provisions in every agreement entered into for this Project, so that those provisions will be binding upon the CONTRACTOR and each Subcontractor.

## **SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS**

**Add** the following SGC 17:

**SGC 17 GENERAL INFORMATION.** This Project is currently funded by the City and Borough of Juneau, Alaska 2014 Series I Bond Proceeds, 2013 Port Revenue Bond Approval, Marine Passenger Fees, Port Development Fees.

**SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS**

**Employment Security Tax Clearance**

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

To: Alaska Department of Labor  
Juneau Field Tax Office  
PH 907-465-2787  
FAX 907-465-2374

From: \_\_\_\_\_

**Subject: Seawalk – Bridge to Gold Creek, Phase I  
Contract No. E16-126**

Timeframe of Contract \_\_\_\_\_

Please advise whether or not clearance is granted for the following CONTRACTOR or Subcontractor:  
(List only one CONTRACTOR or Subcontractor per page.)

_____	_____
Name	Address

Per AS 23.20.265 of the Alaska Employment Security Act, this request is for tax liability clearance and release to make final payment for WORK performed under the subject contract. Please send your response to:

Greg Smith, Contract Administrator  
Engineering Department  
155 S. Seward Street  
Juneau, Alaska 99801  
FAX 907-586-4530

- ( ) Tax Clearance is granted.  
( ) Tax Clearance is NOT granted.

Remarks: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Title

**END OF SECTION**

**SECTION 00830 - ALASKA LABOR STANDARDS, REPORTING, AND  
PREVAILING WAGE RATE DETERMINATION**

State of Alaska, Department of Labor, Laborers' and Mechanics' Minimum Rates of Pay, AS 36.05.010 and AS 36.05.050, Wage and Hour Administration Pamphlet No. 600, the latest edition published by the State of Alaska, Department of Labor 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.

Correspondence regarding Title 36 requirements may be submitted electronically or paper copies can be submitted by mail. To submit Title 36 documents electronically, go to <https://myalaska.state.ak.us/home/app>. If filing electronically, submit certified payrolls to ADOL at the website above and email a copy of all certified payrolls to Greg Smith at the email address below. If Contractor elects to submit paper copies, they should be submitted to the physical addresses below.

**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 this list to the Wage and Hour Section (contact information below).

**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. Indicate **"Start"** on your first payroll, and **"Final"** on your last payroll for this Project.

As part of the **final payment request package**, CONTRACTOR must submit a "NOTICE OF COMPLETION OF PUBLIC WORKS" form signed by ADOL personnel.

**Contact Information:**

***Wage and Hour Section***  
State of Alaska  
Department of Labor and Workforce Development  
Labor Standards and Safety Division                      and  
Wage and Hour Administration  
P.O. Box 11149  
Juneau, AK 99811-1149  
907-465-4842  
<http://labor.state.ak.us/lss/home.htm>

***Greg Smith, Contract Administrator***  
City and Borough of Juneau  
155 S. Seward Street  
Juneau, AK 99801  
(907) 586-0873  
[greg.smith@juneau.org](mailto:greg.smith@juneau.org)

**END OF SECTION**

## **SECTION 00852 - PERMITS**

### **PART 1 - GENERAL**

#### **1.1 INDEX OF PERMITS**

- A. US Army Corps of Engineers, Permit No. POA-2014-251, attached, has been issued for this project. The CBJ has requested and received verbal notification that the Access Pad shown on Drawings between the shoreline and Habitat Island can be temporarily filled to higher than existing elevations provided that the Access Pad is restored to existing elevations following completion of all intertidal construction. This condition is intended to be included in a permit modification when needed for construction. If the successful bidder has other proposed methods of performing the work that may require additional permit modifications, the CBJ will assist the contractor as possible in acquiring those permit modifications. However, the contractor should not rely for bidding purposes on additional permit modifications being issued.
- B. City and Borough of Juneau, City State Project Review and Building Permit, to be issued by Addendum.
- C. Stormwater Pollution Prevention Plan for Construction Activities, and all other permits required to complete the Work shall be obtained by CONTRACTOR.
- D. Contractor shall comply with all conditions of all permits required for the project.

#### **PART 2 – PRODUCTS (Not Used)**

#### **PART 3 – EXECUTION (Not Used)**

**END OF SECTION**



DEPARTMENT OF THE ARMY  
ALASKA DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
REGULATORY DIVISION  
P.O. BOX 22270  
JUNEAU, ALASKA 99802

RECEIVED

MAR 05 2015

CBJ ENGINEERING

Regulatory Division  
POA-2014-251

March 4, 2015

Mr. Skye Stekoll  
City and Borough of Juneau  
155 South Seward Street  
Juneau, Alaska 99801

Dear Mr. Stekoll:

Enclosed is the signed Department of the Army permit, file number POA-2014-251, Gastineau Channel, which authorizes the construction of a habitat island, park, habitat enhancement activities, and an elevated walkway. The project site is located within Section 23, T. 41 S., R. 67 E., Copper River Meridian; USGS Quad Map Juneau B-2; Latitude 58.298629° N., Longitude -134.42309° W.; in Juneau, Alaska. Also enclosed is a Notice of Authorization which should be posted in a prominent location near the authorized work.

If changes to the plans or location of the work are necessary for any reason, plans must be submitted to us immediately. Federal law requires approval of any changes before construction begins.

Nothing in this letter excuses you from compliance with other Federal, State, or local statutes, ordinances, or regulations.

Please contact me via email at [Matthew.T.Brody@usace.army.mil](mailto:Matthew.T.Brody@usace.army.mil), by mail at the address above, or by phone at (907) 790-4493, if you have questions. For more information about the Regulatory Program, please visit our website at <http://www.poa.usace.army.mil/Missions/Regulatory.aspx>.

Sincerely,

Matthew Brody  
Regulatory Specialist

Enclosures

CF:

[Skye.Stekoll@juneau.org](mailto:Skye.Stekoll@juneau.org)  
[Michel.Elfers@juneau.org](mailto:Michel.Elfers@juneau.org)  
[Rorie.Watt@juneau.org](mailto:Rorie.Watt@juneau.org)

# DEPARTMENT OF THE ARMY PERMIT

**Permittee:** City and Borough of Juneau – Skye Stekoll

**Permit No.:** POA-2014-251

**Issuing Office:** U.S. Army Engineer District, Alaska

**NOTE:** The term "you" and its derivatives, as used in this permit, means the permittee or any future transferee. The term "this office" refers to the appropriate district or division office of the Corps of Engineers having jurisdiction over the permitted activity or the appropriate official of that office acting under the authority of the commanding officer.

You are authorized to perform work in accordance with the terms and conditions specified below.

**Project Description:** Place dredged and/or fill material into waters of the U.S. below the high tide line, including special aquatic sites, as well as the placement of structures into waters of the U.S. below the Mean High Water to facilitate the construction of a habitat island, park, and elevated walkway. Specifically the work includes:

1. Discharge 410 cubic yards of riprap, soil material, cobble, and gravel below the high tide line (HTL) (+20.8 feet above the 0.0 foot contour line) impacting 0.1 acres of marine intertidal substrate to vegetate the existing riprap side slopes.
2. Discharge 11,500 cubic yards of shot rock and riprap below the HTL impacting 0.58 acres of marine intertidal substrate to construct a park.
3. Discharge 30,000 cubic yards of shot rock and riprap below the HTL impacting 2.69 acres of marine intertidal and subtidal substrate including 0.12 acres of vegetated shallows to construct a recreational island.
4. Discharge 360 cubic yards of shot rock below the HTL impacting 0.07 acres of marine intertidal substrate to access the proposed island.
5. Discharge 127 cubic yards of rock below the HTL impacting 0.05 acres of marine intertidal substrate to construct two pedestrian paths for access to the proposed recreational island and intertidal waters.
6. Install 65 each 14-inch to 16-inch diameter steel piles below the Mean High Water Mark (+15.4 feet above the 0.0 foot contour line) to construct two viewing platforms and one pedestrian and bicycle path.
7. Create a total of 0.37 acres of tidal wetland vegetation through transplanting, and new plantings including the transplanting of 0.12 acres of existing Alkali grass and other native species on site.

All work will be performed in accordance with the attached plan, sheets **[1-17]**, dated **[January 26, 2015]**.

**Project Location:** The project site is located within Section 23, T. 41 S., R. 67 E., Copper River Meridian; USGS Quad Map Juneau B-2; Latitude 58.298629° N., Longitude -134.42309° W.; in Juneau, Alaska.

## Permit Conditions:

### **General Conditions:**

1. The time limit for completing the work authorized ends on **February 29, 2020.**

If you find that you need more time to complete the authorized activity, submit your request for a permit renewal to this office for consideration at least six months before the above date is reached.

2. You must maintain the activity authorized by this permit in conformance with the terms and conditions of this permit. You are not relieved of this requirement if you abandon the permitted activity, although you may make a good faith transfer to a third party in compliance with General Condition 4 below. Should you wish to cease to maintain the authorized activity or should you desire to abandon it without a good faith transfer, you must obtain a modification of this permit from this office, which may require restoration of the area.
3. If you discover any previously unknown historic or archeological remains while accomplishing the activity authorized by this permit, you must immediately notify this office of what you have found. We will initiate the Federal and State coordination required to determine if the remains warrant a recovery effort or if the site is eligible for listing in the National Register of Historic Places.
4. If you sell the property associated with this permit, you must obtain the signature of the new owner in the space provided and forward a copy of the permit to this office to validate the transfer of this authorization.
5. If a conditioned water quality certification has been issued for your project, you must comply with the conditions specified in the certification as special conditions to this permit. For your convenience, a copy of the certification is attached if it contains such conditions.
6. You must allow representatives from this office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of your permit.

### **Special Conditions:**

1. Effective erosion control measures shall be installed and maintained before, during, and after construction to prevent erosion and the introduction of sediments and/or contaminants into adjacent waters of the United States. These structures shall remain in place until all fills (including side slopes) or other disturbed areas subject to potential erosion have been permanently stabilized.
2. The permittee shall ensure that all synthetic erosion control features (e.g., floating silt curtain, silt fencing, netting, mats), which are intended for temporary use during construction, are completely removed and properly disposed of after their initial purpose has been served. Only natural fiber materials, which will degrade after time, may be used as permanent measures, or if used temporarily, may be abandoned in place.
3. Project boundaries shall be clearly identified in the field (e.g., staking, flagging, silt fencing, etc.) prior to site clearing and construction to ensure avoidance of impacts to waters of the United States, including wetlands, beyond the authorized project footprint. All areas of existing tidal vegetation that are to remain undisturbed, as identified on sheets 5 and 6 of 17 in the project plans, shall be clearly identified in the field (e.g., staking, flagging, silt fencing, etc.) prior to construction.
4. All fill material for the authorized work shall be clean, free from toxic pollutants in toxic amounts. Material used for construction or discharge shall not consist of unsuitable material (e.g., trash, debris, car bodies, asphalt, etc.).
5. Excess fill material shall not be staged or disposed within wetlands or other waters of the United States.

6. All fill slopes are expected to retain their design grade and location. The Habitat Island portion of the project shall be within  $\pm 5$  feet from the original design elevations.
7. The portion of the project identified in the attached map (sheet 16 of 17) that would include the authorized Habitat Island and enhancement activities on parcel 1C060K670010 within and owned by the City and Borough of Juneau shall be protected from future development and disturbance through the recording of a Restrictive Covenant. The Restrictive Covenant shall be recorded within 6 months of the date of this permit and proof in writing shall be submitted to this office once completed. The restrictive covenant shall be reviewed and approved by the Corps of Engineers Juneau Regulatory Field Office prior to recording. The language in the Restrictive Covenant shall protect the site from degradation and support the continued presence and functions of the current aquatic resources as well as any established or enhanced aquatic resources and their functions. The language in the Restrictive Covenant shall prohibit site degradation through prohibition of development, including any structures, grading, vegetation removal, motorized vehicle use/access. Exemptions to these requirements include structures or work that improves the sites function and/or habitat, site maintenance, and any vegetation removal associated with the control of invasive plant or animal species. The Restrictive Covenant shall be recorded with the Registrar of Deeds or other appropriate official charged with the responsibility for maintain records of title to or interest in real property.
8. Vegetation and plant community establishment proposed as part of the authorized project shall achieve the following by the end of the 5<sup>th</sup> growing season:
  - a. Achieve aerial cover of native vegetation of at least 50% over 0.37 acres of tidal wetland vegetation such as Alkali grass (*Puccinellia nutkaensis*) Lyngbye sedge (*Carex lyngbyei*) after five full growing seasons from initial planting.
  - b. Achieve aerial cover of native vegetation of at least 50% over 0.93 acres on the authorized Habitat Island of species such as Beach Rye (*Elymus mollis*), Red Fescue (*Festuca rubra*), Tufted Hairgrass (*Deschamosia caespitosa*), Red Osier Dogwood (*Cornus stolonifera*), Sitka Spruce (*Picea sitchensis*), and Black Cottonwood (*Populus balsamifera*) after five full growing seasons from initial planting.
  - c. Achieve aerial cover of native vegetation of at least 50% along 830 linear feet of existing rocky shoreline of species such as Red Osier Dogwood (*Cornus stolonifera*), Sitka Spruce (*Picea sitchensis*), and Black Cottonwood (*Populus balsamifera*) after five full growing seasons of planting.
9. The growth and/or spread of invasive plants onsite is prohibited. Prior to construction the site will be surveyed for invasive plants. All identified invasive plants shall be removed and disposed of offsite prior to construction. Corrective measures shall be implemented to preclude the growth and/or spread of any invasive plants within the project area identified by the annual vegetation cover maps submitted as part of the annual monitoring reports. Invasive plant species are identified as the 37 species listed in table 1.1 of the *Disposal and Control of Invasive Plant Species* report prepared by Alaska Department of Transportation and Public Facilities Southeast Region dated February 2014. The species identified in this report is attached to this permit.
10. An Adaptive Management Plan shall be developed by the applicant in the event of unsuccessful achievement of conditions 6, 8, and 9 of this permit. The plan shall be developed with in consultation with the Corps and any other Federal or State agencies as appropriate. The plan shall analyze any noncompliance with conditions 6, 8, and 9 and develop a strategy to address the issue.
11. All pile driving shall only be performed during low tidal stages (a six hour period beginning three hours before low tide and ending three hours past low tide). Piles shall be driven using a vibratory hammer to the extent practicable. If an impact hammer is required because of substrate type or the need for seismic stability a pile cushion shall be used between hammer and pile.
12. Monitoring reports are required: Annual monitoring reports shall be submitted on the status of the Habitat Island and associated enhancement work. The reports shall be submitted by December 31 following each of the first five growing seasons and produced by a member of the projects design science team or another qualified individual designated by the applicant. The reports shall be

forwarded to the U.S. Army Corps of Engineers Juneau Field Office at: Alaska District, Army Corps of Engineers, Regulatory Division, Juneau Field Office at address P.O. Box 22270, Juneau, Alaska 99802-2270. The reports shall, at a minimum, include the following information:

- a. Vegetation cover maps at an appropriate scale shall be submitted for each reported growing season. Vegetation cover maps shall be submitted for existing vegetation, new plantings (seeds, transplanted or purchased plugs, and transplanted or purchased contained plants), and invasive plants. The vegetation cover maps shall identify the vegetation type (species name), vegetated area, and percent cover for the vegetated area. The maps shall demonstrate compliance with the above special condition number 8 and 9. Photographs illustrating the vegetation identified above shall be included.
  - b. A report documenting the stability of slopes for the Habitat Island and identifying any change from the design slope grade shall be submitted. The report shall document and identify any change in original design elevation of greater than  $\pm$  one foot through the submission of a topographic survey. Photographs shall be submitted identifying the surveyed area and slopes. The survey(s) shall demonstrate compliance with the above special condition number 6.
13. Your use of the permitted activity must not interfere with the public's right to free navigation on all navigable waters of the U.S.
  14. You must install and maintain, at your expense, any safety lights and signals prescribed by the U.S. Coast Guard (USCG), through regulations or otherwise, on your authorized facilities. The USCG may be reached at the following address and telephone number: Commander (oan), 17th Coast Guard District, P.O. Box 25517, Juneau, Alaska 99802, (907) 463-2272.
  15. The permittee understands and agrees that, if future operations by the U.S. require the removal, relocation, or other alteration, of the structure or work herein authorized, or if, in the opinion of the Secretary of the Army or his authorized representative, said structure or work shall cause unreasonable obstruction to the free navigation of the navigable waters, the permittee will be required, upon due notice from the Corps of Engineers, to remove, relocate, or alter the structural work or obstructions caused thereby, without expense to the U.S. No claim shall be made against the U.S. on account of any such removal or alteration.

**Special Information:**

Any condition incorporated by reference into this permit by General Condition 5, remains a condition of this permit unless expressly modified or deleted, in writing, by the District Engineer or his authorized representative.

**Further Information:**

1. Congressional Authorities: You have been authorized to undertake the activity described above pursuant to:

(X) Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. 403).

(X) Section 404 of the Clean Water Act (33 U.S.C. 1344).

2. Limits of this authorization.

- a. This permit does not obviate the need to obtain other Federal, State, or local authorization required by law.
- b. This permit does not grant any property rights or exclusive privileges.
- c. This permit does not authorize any injury to the property or rights of others.
- d. This permit does not authorize interference with any existing or proposed Federal project.

3. Limits of Federal Liability. In issuing this permit, the Federal Government does not assume any liability for the following:

- a. Damages to the permitted project or uses thereof as a result of other permitted or unpermitted activities or from natural causes.
- b. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.
- c. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.
- d. Design or construction deficiencies associated with the permitted work.
- e. Damage claims associated with any future modification, suspension, or revocation of this permit.

4. Reliance on Applicant's Data: The determination of this office that issuance of this permit is not contrary to the public interest was made in reliance on the information you provided.

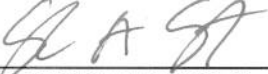
5. Reevaluation of Permit Decision. This office may reevaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

- a. You fail to comply with the terms and conditions of this permit.
- b. The information provided by you in support of your permit application proves to have been false, incomplete, or inaccurate (See 4 above).
- c. Significant new information surfaces which this office did not consider in reaching the original public interest decision.

Such a reevaluation may result in a determination that it is appropriate to use the suspension, modification, and revocation procedures contained in 33 CFR 325.7 or enforcement procedures such as those contained in 33 CFR 326.4 and 326.5. The referenced enforcement procedures provide for the issuance of an administrative order requiring you to comply with the terms and conditions of your permit and for the initiation of legal action where appropriate. You will be required to pay for any corrective measures ordered by this office, and if you fail to comply with such directive, this office may in certain situations (such as those specified in 33 CFR 209.170) accomplish the corrective measures by contract or otherwise and bill you for the cost.

6. Extensions. General Condition 1 establishes a time limit for the completion of the activity authorized by this permit. Unless there are circumstances requiring either a prompt completion of the authorized activity or a reevaluation of the public interest decision, the Corps will normally give favorable consideration to a request for an extension of this time limit.

Your signature below, as permittee, indicates that you accept and agree to comply with the terms and conditions of this permit.

  
\_\_\_\_\_  
(PERMITTEE) AND TITLE  
SKYE A. STEKOLL, PROJECT MANAGER  
CBJ ENGINEERING

3/2/15  
\_\_\_\_\_  
(DATE)

This permit becomes effective when the Federal official, designated to act for the Secretary of the Army, has signed below.

  
\_\_\_\_\_  
FOR (DISTRICT COMMANDER)  
Colonel Christopher D. Lestochi  
Matthew Brody  
Regulatory Specialist  
Southeast Section

3/4/2015  
\_\_\_\_\_  
(DATE)

When the structures or work authorized by this permit are still in existence at the time the property is transferred the terms and conditions of this permit will continue to be binding on the new owner(s) of the property. To validate the transfer of this permit and the associated liabilities associated with compliance with its terms and conditions have the transferee sign and date below.

\_\_\_\_\_  
(TRANSFEREE)

\_\_\_\_\_  
(DATE)



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

Department of Environmental  
Conservation

DIVISION OF WATER  
Wastewater Discharge Authorization Program

555 Cordova Street  
Anchorage, Alaska 99501-2617  
Main: 907.269.6285  
Fax: 907.334.2415  
[www.dec.alaska.gov/water/wwdp](http://www.dec.alaska.gov/water/wwdp)

October 28, 2014

Certified Mail: 7012-3460-0002-9326-6629

Skye Stekoll  
City and Borough of Juneau  
155 South Seward Street  
Juneau, AK 99801

Re: Gastineau Channel Waterfront Upgrade  
Reference No. POA-2014-251

Dear Mr. Stekoll:

In accordance with Section 401 of the Federal Clean Water Act of 1977 and provisions of the Alaska Water Quality Standards, the Department of Environmental Conservation (DEC) is issuing the enclosed Certificate of Reasonable Assurance for placement of fill material in waters of the U.S. in association with the upgrades to the Juneau Waterfront area.

DEC regulations provide that any person who disagrees with this decision may request an informal review by the Division Director in accordance with 18 AAC 15.185 or an adjudicatory hearing in accordance with 18 AAC 15.195 – 18 AAC 15.340. An informal review request must be delivered to the Director, Division of Water, 555 Cordova Street, Anchorage, AK 99501, within 15 days of the permit decision. Visit <http://www.dec.state.ak.us/commish/ReviewGuidance.htm> for information on Administrative Appeals of Department decisions.

An adjudicatory hearing request must be delivered to the Commissioner of the Department of Environmental Conservation, 410 Willoughby Avenue, Suite 303, PO Box 111800, Juneau, AK 99811-1800, within 30 days of the permit decision. If a hearing is not requested within 30 days, the right to appeal is waived.

By copy of this letter we are advising the U.S. Army Corps of Engineers of our actions and enclosing a copy of the certification for their use.

Sincerely,

A handwritten signature in black ink, appearing to read "James Rypkema".  
James Rypkema

Program Manager, Storm Water and Wetlands

Enclosure: 401 Certificate of Reasonable Assurance

cc: (with encl.)  
Matthew Brody, USACE, Juneau  
Jackie Timothy, ADF&G

USFWS Field Office Juneau  
Mark Jen, EPA Operations, Anchorage

**STATE OF ALASKA**  
**DEPARTMENT OF ENVIRONMENTAL CONSERVATION**  
**CERTIFICATE OF REASONABLE ASSURANCE**

A Certificate of Reasonable Assurance, in accordance with Section 401 of the Federal Clean Water Act and the Alaska Water Quality Standards is issued to City and Borough of Juneau at 155 South Street, Juneau, Alaska for placement of fill material in waters of the U.S. in association with the upgrades to the Juneau Waterfront in Gastineau Channel. The applicant's stated purpose is to restore and enhance the downtown Juneau waterfront by providing public access to bicycles and pedestrians, create a gateway park that incorporates a whale statue, and to provide educational interpretation for coastal environments. The applicant requests authorization for the following work in waters and navigable waters of the United States (U.S.):

1. Discharge 410 cubic yards of riprap, soil material, cobble, and gravel below the High Tide Line (+20.8 feet above the 0.0 foot contour line) (HTL) impacting 0.1 acres of marine intertidal substrate to vegetate the existing riprap side slopes.
2. Discharge 11,500 cubic yards of shot rock, and riprap below the HTL impacting 0.58 acres of marine intertidal substrate to construct a park.
3. Discharge 30,000 cubic yards of shot rock and riprap below the HTL impacting 2.69 acres of marine intertidal and subtidal substrate including 0.12 acres of vegetated shallows to construct a recreational island.
4. Discharge 360 cubic yards of shot rock below the HTL impacting 0.07 acres of marine intertidal substrate to access the proposed island.
5. Discharge 127 cubic yards of rock below the HTL impacting 0.05 acres of marine intertidal substrate to construct two pedestrian paths for access to the proposed recreational island and intertidal waters.
6. Install 65, 14-inch to 16-inch diameter steel piles below the Mean High Water Mark (+15.4 feet above the 0.0-foot contour line) to construct two viewing platforms and one pedestrian and bicycle path.

A State Water Quality Certification is required under Section 401 because the proposed activity will be authorized by a U.S. Army Corps of Engineers permit, reference number POA-2014-251 and a discharge of pollutants to waters of the U.S. located in the State of Alaska may result from the proposed activity. Public notice of the application for this certification was given as required by 18 AAC 15.180 in the Corps Public Notice POA-2014-251 posted from August 19, 2014 to September 18, 2014.

The proposed activity is located within Section 23, T. 41 S., R. 67 E., Copper River Meridian; USGS Quad Map Juneau B-2; Latitude 58.298629° N., Longitude -134.42309° W.; in Juneau, Alaska..

The Department of Environmental Conservation (DEC) reviewed the application and certifies that there is reasonable assurance that the proposed activity, as well as any discharge which may result, will comply with applicable provisions of Section 401 of the Clean Water Act and the Alaska Water Quality Standards, 18 AAC 70, provided that the following alternative measures are adhered to.

1. Reasonable precautions and controls must be used to prevent incidental and accidental discharge of petroleum products or other hazardous substances. Fuel storage and handling activities for equipment must be sited and conducted so there is no petroleum contamination of the ground, surface runoff or water bodies.
2. During construction, spill response equipment and supplies such as sorbent pads shall be available and used immediately to contain and cleanup oil, fuel, hydraulic fluid, antifreeze, or other pollutant spills. Any spill amount must be reported in accordance with Discharge Notification and Reporting Requirements (AS 46.03.755 and 18 AAC 75 Article 3). The applicant must contact by telephone the DEC Area Response Team for Southeast Alaska (907) 465-5340 during work hours or 1-800-478-9300 after hours. Also, the applicant must contact by telephone the National Response Center at 1-800-424-8802.
3. Construction equipment shall not be operated below the ordinary high water mark if equipment is leaking fuel, oil, hydraulic fluid, or any other hazardous material. Equipment shall be inspected on a daily basis for leaks. If leaks are found the equipment shall not be used and pulled from service until the leak is repaired.
4. All work areas, material access routes, and surrounding wetlands involved in the construction project shall be clearly delineated and marked in such a way that equipment operators do not operate outside of the marked areas.
5. Organic overburden soil stockpiles shall be stabilized as soon as practicable after placement to minimize erosion, sediment runoff, or dust generation. Indicators of excess erosion include: gullyng, head cutting, caving, block slippage, material sloughing, etc.
6. Fill material must be clean sand, gravel or rock, free from petroleum products and toxic contaminants in toxic amounts.
7. Fill placed during winter construction within wetlands that during the summer contain surface water that is connected to natural bodies of water, must be stabilized or contained in the spring prior to breakup. This action is to ensure that silts are not carried from the fill to the natural bodies of water in the spring and summer.
8. Prior to fill placement in the spring or summer, a silt fence or similar structure shall be installed on a line parallel to and within five feet of the proposed fill toe of slope within all wetland areas that contain standing water that is connected to any natural body of water or where the fill toe is within 25 feet of such a water body. This structure shall remain in place until the fill has been stabilized or contained in another manner.
9. Any disturbed ground and exposed soil not covered with fill must be stabilized and re-vegetated with endemic species, grasses, or other suitable vegetation in an appropriate manner to minimize erosion and sedimentation, so that a durable vegetative cover is established in a timely manner.

This certification expires five (5) years after the date the certification is signed. If your project is not completed by then and work under U.S Army Corps of Engineers Permit will continue, you must submit an application for renewal of this certification no later than 30 days before the expiration date (18 AAC 15.100).

Date: October 28, 2014

  
\_\_\_\_\_  
James Rypkema, Program Manager  
Storm Water and Wetlands

**CITY/BOROUGH OF JUNEAU  
DOWNTOWN SEAWALK  
BRIDGE TO GOLD CREEK**

**CORPS PERMIT GRAPHICS**

DATE: March 13, 2014

**PREPARED BY:**

- TETRA TECH
- J.A. BRENNAN ASSOCIATES, PLLC
- BOSWORTH BOTANICAL CONSULTING
- CATHY POHL
- CH2M HILL
- COAST AND HARBOR, ENGINEERING  
Inc.
- DOWL
- PATRICIA HARRIS

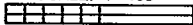
**LIST OF SHEETS:**

1. COVER
2. VICINITY MAP
3. WETLAND JURISDICTIONAL DETERMINATION MAP
4. EXISTING CONDITIONS PLAN - WEST
5. EXISTING CONDITIONS PLAN - EAST
6. IMPACT AREAS MAP
7. GRADING & LAYOUT PLAN - WEST
8. GRADING & LAYOUT PLAN - EAST
9. PLANTING PLAN - WEST
10. PLANTING PLAN - EAST
11. SITE SECTION A
12. SITE SECTIONS B AND C
13. SITE SECTIONS D AND F
14. SITE SECTION E
15. SITE SECTION G

PERMIT NUMBER: POA-2014-251  
APPLICANT: CITY AND BOROUGH OF JUNEAU  
WATERWAY: GASTINEAU CHANNEL  
PROJECT NAME: SEAWALK AND BRIDGE PARK  
LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
LAT: 58.2986 LON: -134.4230  
PAGE: 1 OF 17, DATE: JANUARY 26, 2015

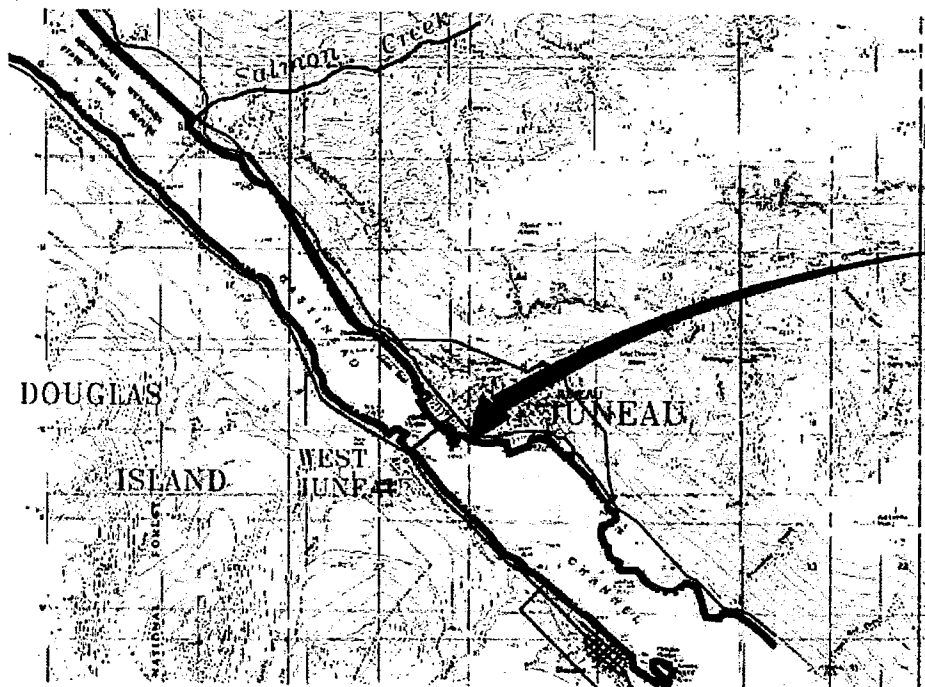


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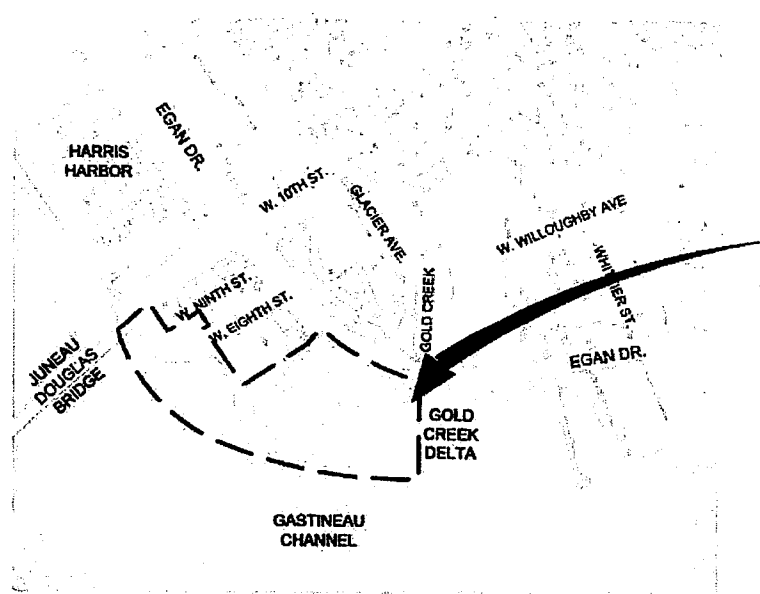
DATUM: MLLW

PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 2 OF 17, DATE: JANUARY 26, 2015



**PROJECT  
LOCATION**

LOCATION MAP



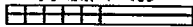
**PROJECT  
LOCATION**

VICINITY MAP

**LOCATION AND VICINITY MAP**

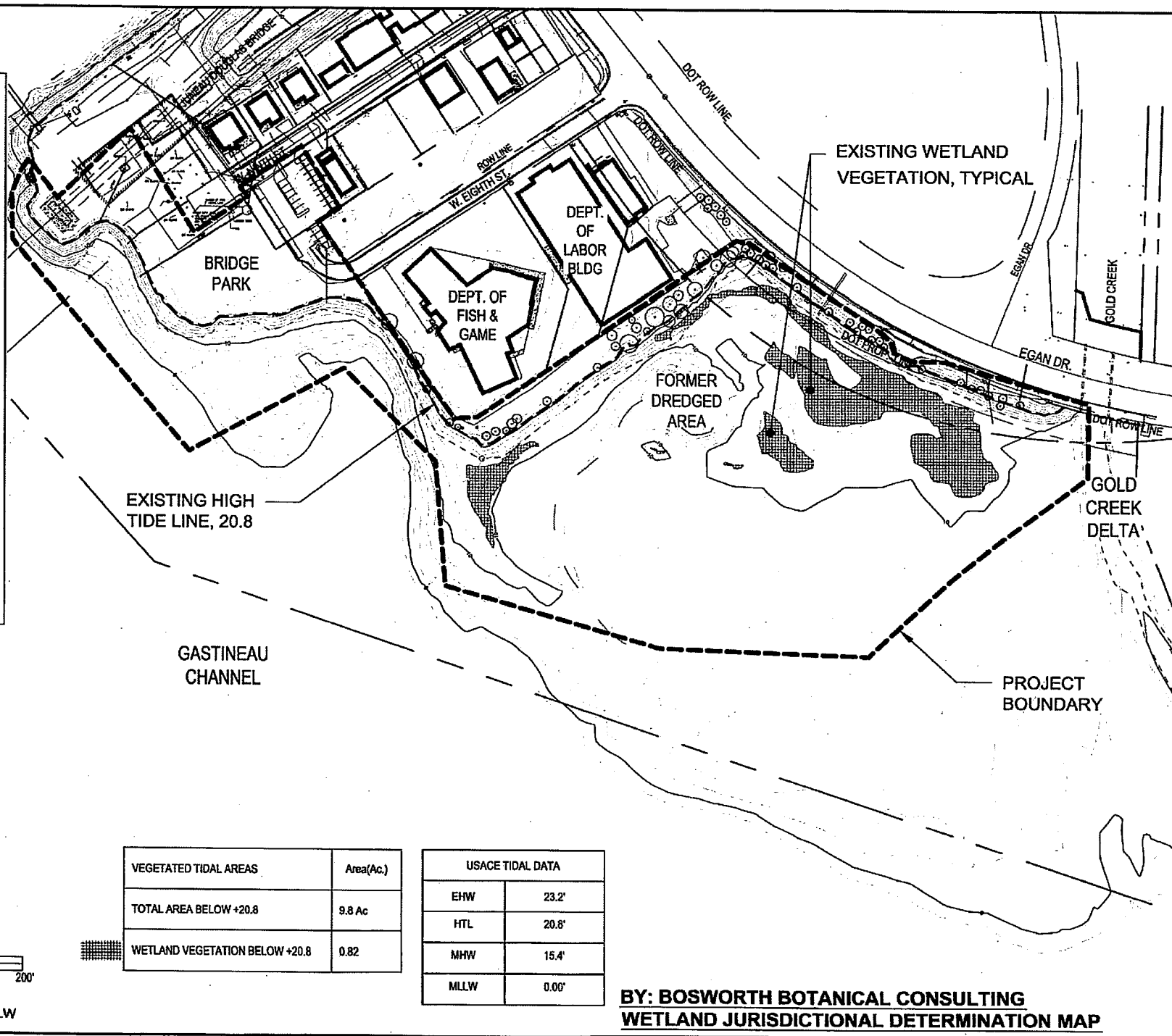


SCALE: 1"=100'



DATUM: MLLW

PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 3 OF 17, DATE: JANUARY 26, 2015



SCALE: 1"=200'  
 0 100' 200'

DATUM: MLLW

VEGETATED TIDAL AREAS	Area(Ac.)
TOTAL AREA BELOW +20.8	9.8 Ac
WETLAND VEGETATION BELOW +20.8	0.82

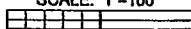
USACE TIDAL DATA	
EHW	23.2'
HTL	20.8'
MHW	15.4'
MLLW	0.00'

BY: BOSWORTH BOTANICAL CONSULTING  
 WETLAND JURISDICTIONAL DETERMINATION MAP

PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 4 OF 17, DATE: JANUARY 26, 2015

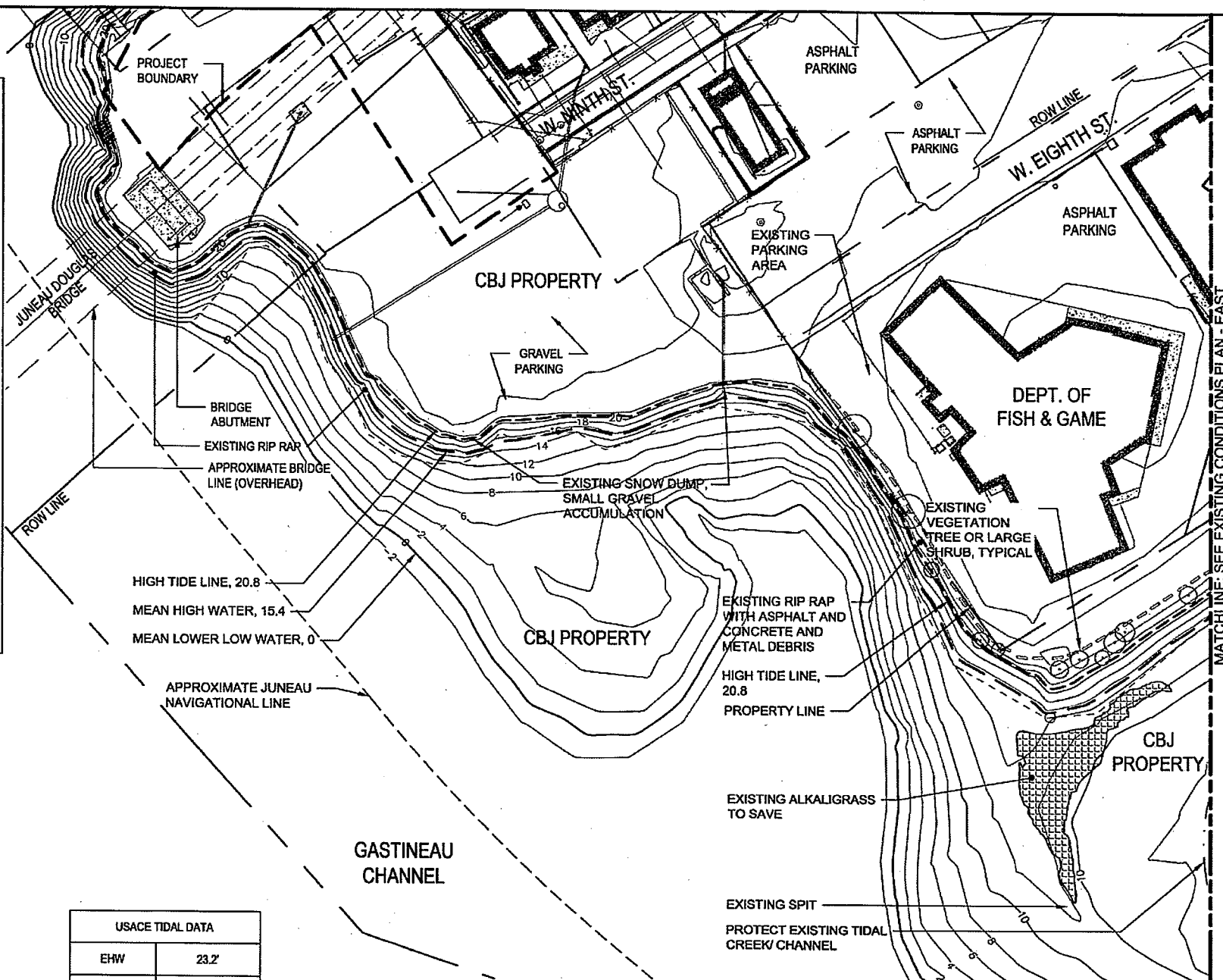


SCALE: 1"=100'



DATUM: MLLW

USACE TIDAL DATA	
EHW	23.2'
HTL	20.8'
MHW	15.4'
MLLW	0.00'



EXISTING CONDITIONS PLAN - WEST

PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 5 OF 17, DATE: JANUARY 26, 2015

MATCHLINE: SEE EXISTING CONDITIONS PLAN - WEST

GRAVEL PARKING  
 DEPT. OF  
 LABOR BLDG

CBJ  
 PROPERTY

PROPERTY  
 LINE  
 MID TO HIGH  
 INTERTIDAL  
 HABITAT (TYP)

EXISTING ALKALIGRASS TO BE  
 IMPACTED, REMOVE AND  
 TRANSPLANT

30" CMP CULVERT  
 OUTLET  
 STORM DRAINAGE  
 FLOW

RIP RAP  
 VIEWPOINT  
 ON EGAN DR.  
 SIDEWALK ON  
 EGAN DR.

USACE TIDAL DATA	
EHW	23.2'
HTL	20.8'
MHW	15.4'
MLLW	0.00'

EXISTING VEGETATION,  
 TREE OR LARGE SHRUB,  
 TYP.

RIPRAP WITH CONCRETE  
 CHUNKS

FORMER  
 DREDGED  
 AREA

MEAN HIGH  
 WATER, 15.4  
 HIGH TIDE  
 LINE, 20.8

MEAN LOWER  
 LOW WATER, 0

PROTECT  
 EXISTING TIDAL  
 CREEK/CHANNEL

CBJ  
 PROPERTY

EXISTING ALKALIGRASS  
 TO BE IMPACTED, REMOVE  
 AND TRANSPLANT

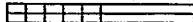
EXISTING ALKALIGRASS  
 TO SAVE

GOLD  
 CREEK  
 DELTA

CBJ  
 PROPERTY



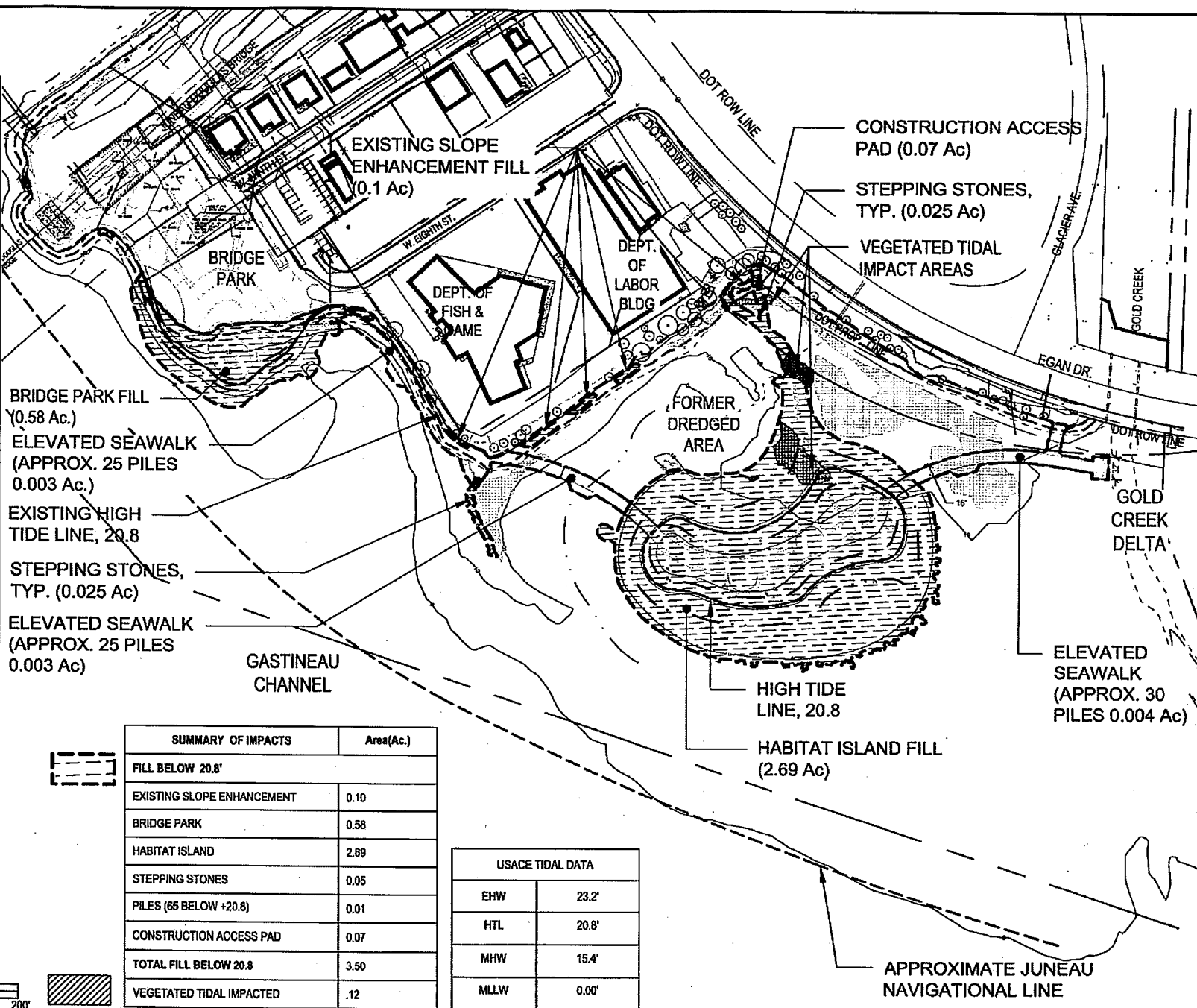
SCALE: 1"=100'



DATUM: MLLW

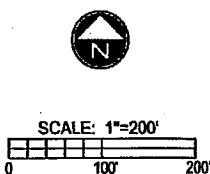
EXISTING CONDITIONS PLAN - EAST

PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23, T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 6 OF 17, DATE: JANUARY 26, 2015



SUMMARY OF IMPACTS	Area(Ac.)
FILL BELOW 20.8'	
EXISTING SLOPE ENHANCEMENT	0.10
BRIDGE PARK	0.58
HABITAT ISLAND	2.69
STEPPING STONES	0.05
PILES (65 BELOW +20.8)	0.01
CONSTRUCTION ACCESS PAD	0.07
TOTAL FILL BELOW 20.8	3.50
VEGETATED TIDAL IMPACTED	.12

USACE TIDAL DATA	
EHW	23.2'
HTL	20.8'
MHW	15.4'
MLLW	0.00'



DATUM: MLLW

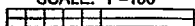
**IMPACT AREAS MAP**

PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 7 OF 17, DATE: JANUARY 26, 2015

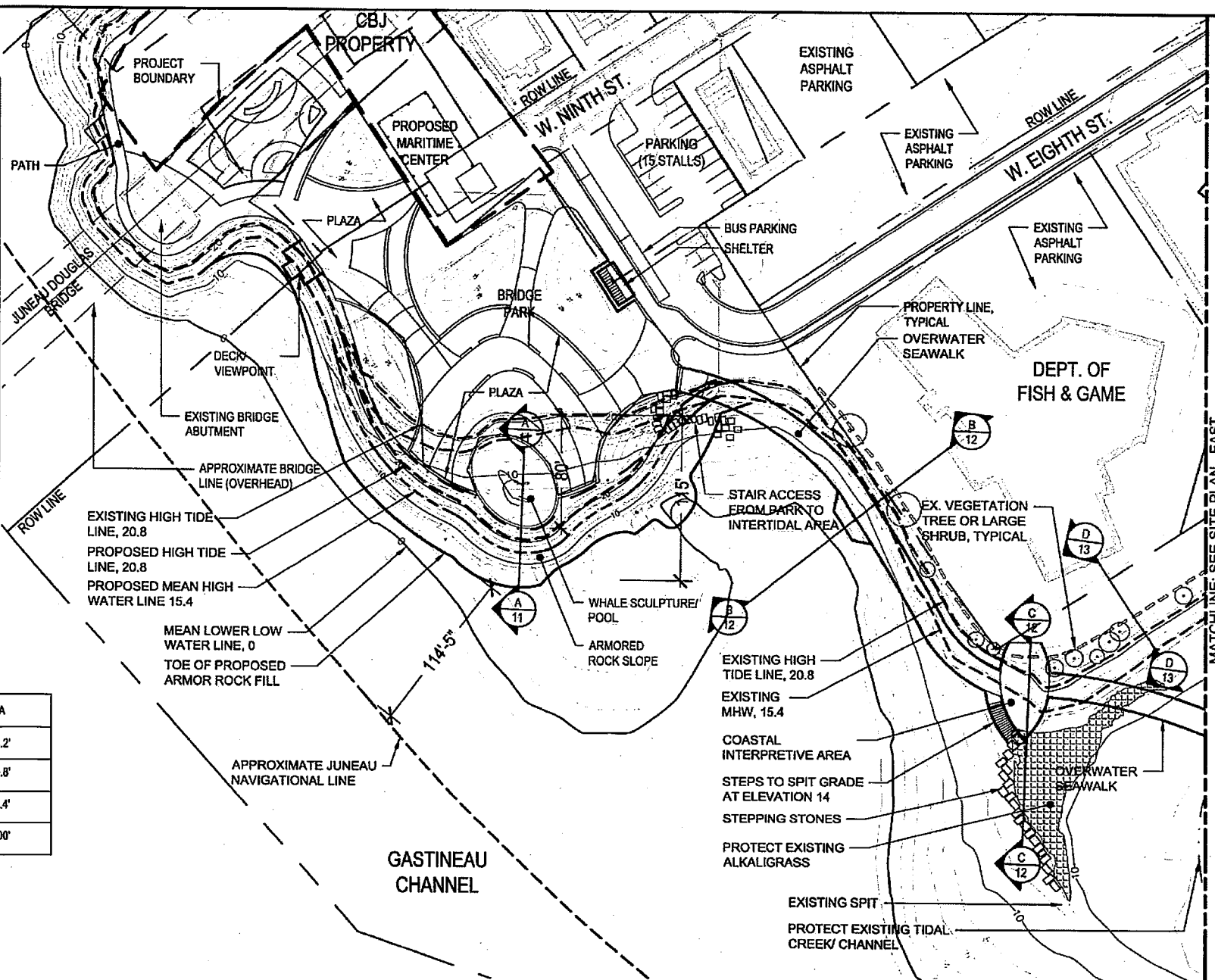
USACE TIDAL DATA	
EHW	23.2'
HTL	20.8'
MHW	15.4'
MLLW	0.00'



SCALE: 1"=100'



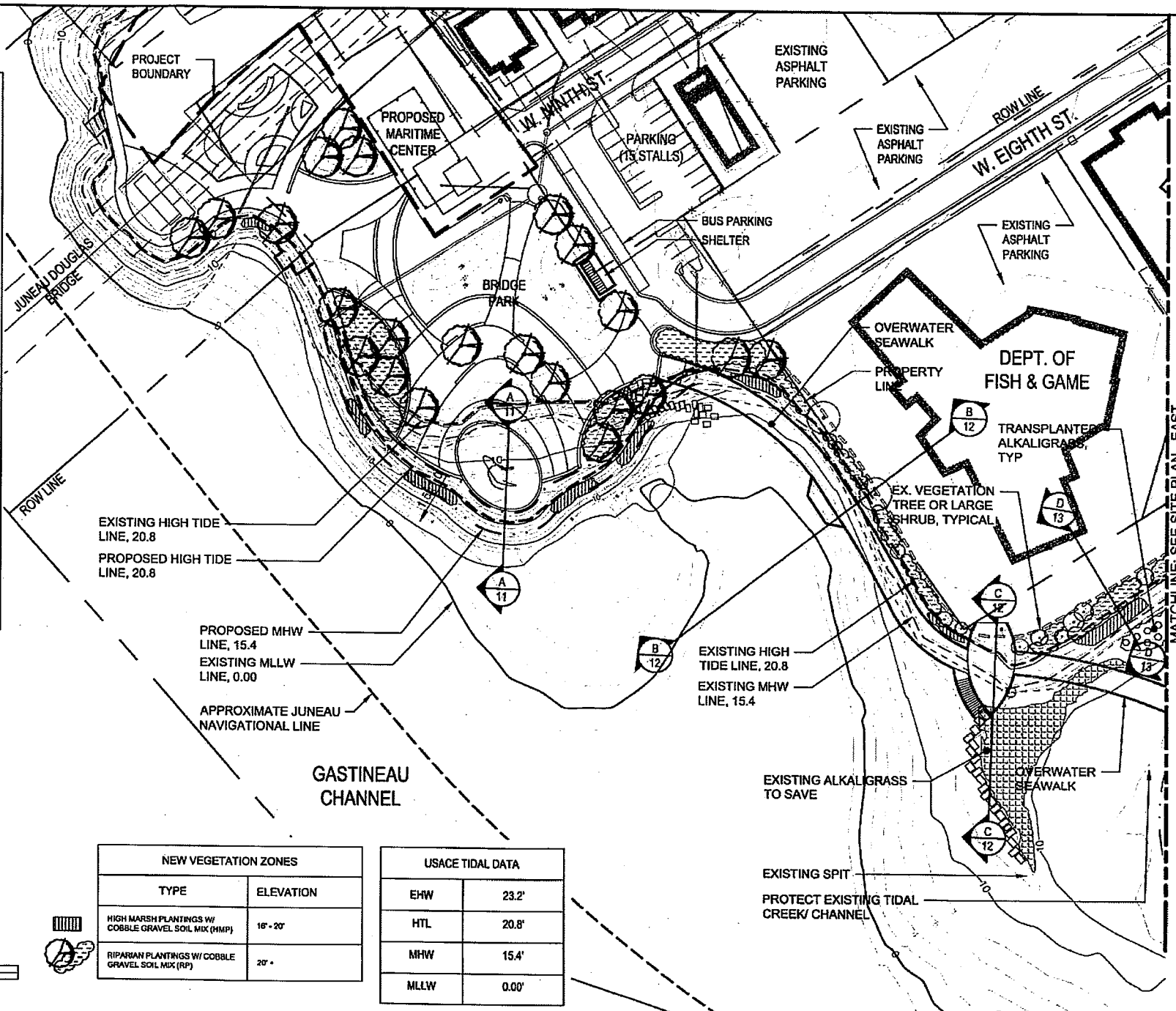
DATUM: MLLW



**GRADING AND LAYOUT - WEST**



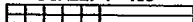
PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 9 OF 17, DATE: JANUARY 26, 2015



MATCHLINE: SEE SITE PLAN - EAST



SCALE: 1"=100'



NEW VEGETATION ZONES	
TYPE	ELEVATION
HIGH MARSH PLANTINGS W/ COBBLE GRAVEL SOIL MIX (HMP)	16' - 20'
RIPARIAN PLANTINGS W/ COBBLE GRAVEL SOIL MIX (RP)	20' +

USACE TIDAL DATA	
EHW	23.2'
HTL	20.8'
MHW	15.4'
MLLW	0.00'

DATUM: MLLW

PLANTING PLAN - WEST

**PERMIT NUMBER: POA-2014-251**

APPLICANT: CITY AND BOROUGH OF JUNEAU

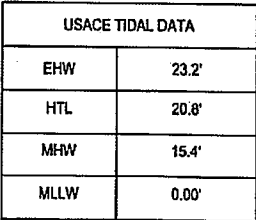
## WATERWAY: GASTINEAU CHANNEL

**PROJECT NAME: SEAWALK AND BRIDGE PARK**

LOCATION: SEC 23., T.41 S., R. 67 E, CRM.,

**LAT: 58.2986 LON: -134.4230**

PAGE: 10 OF 17, DATE: JANUARY 26, 2015



**NOTES:**

1. LARGE NUMBER (EX. "1") ON PLAN INDICATES MATERIAL TYPE BY REGION. REFER TO COASTAL REPORT - GOLD CREEK SEAWALK PROJECT - BASIS OF COASTAL ENGINEERING DESIGN

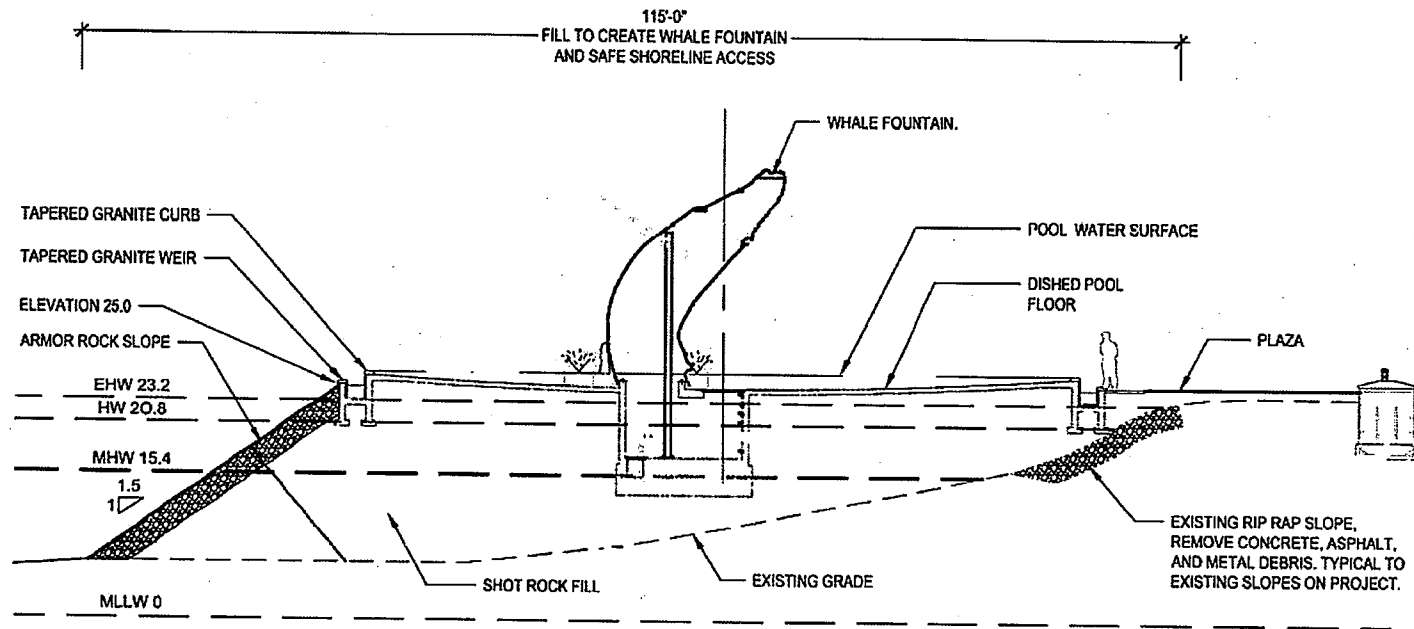
— SEE NOTE 1

## NEW VEGETATION ZONES

TYPE	ELEVATION
LOWER LOW MARSH (LLM)	11'-15'
LOW MARSH PLANTINGS (LMP)	15'-16'
HIGH MARSH PLANTINGS W/ COBBLE GRAVEL SOIL MIX (HMP)	16' - 20'
RIPARIAN PLANTINGS W/ COBBLE GRAVEL SOIL MIX (RP)	20' +

## PLANTING PLAN - EAST

PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23, T. 41 S., R. 67 E., CRM.  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 11 OF 17, DATE: JANUARY 26, 2015



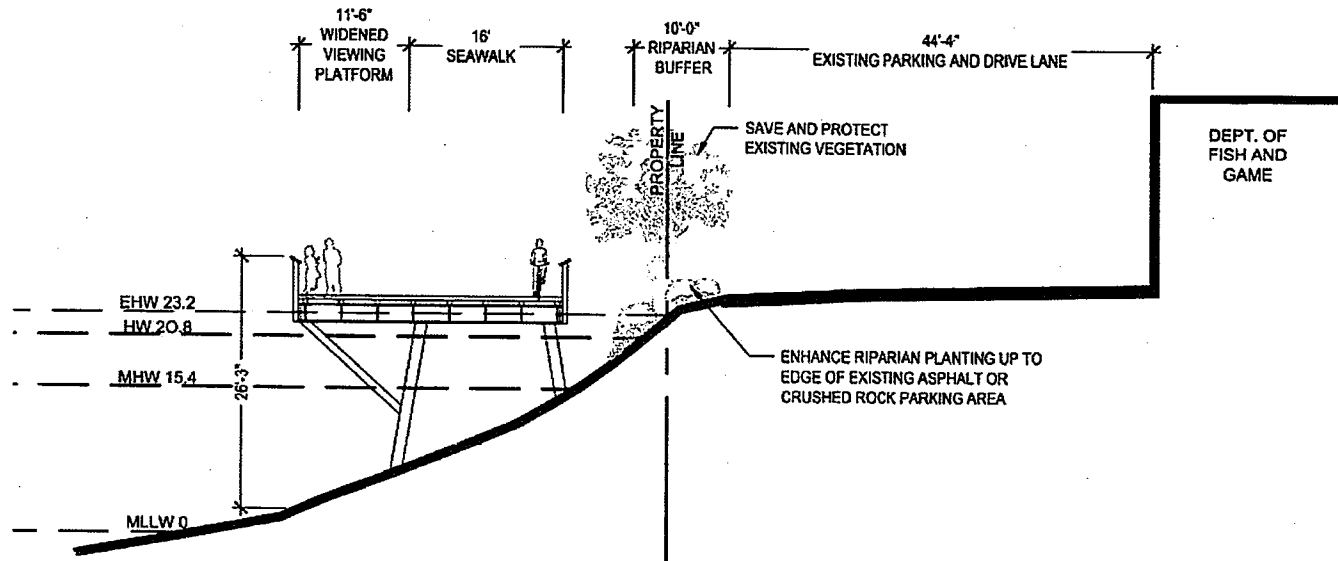
## Section A - WHALE SCULPTURE AT BRIDGE PARK

SCALE: 1" = 20'-0"

A

**SITE SECTIONS**

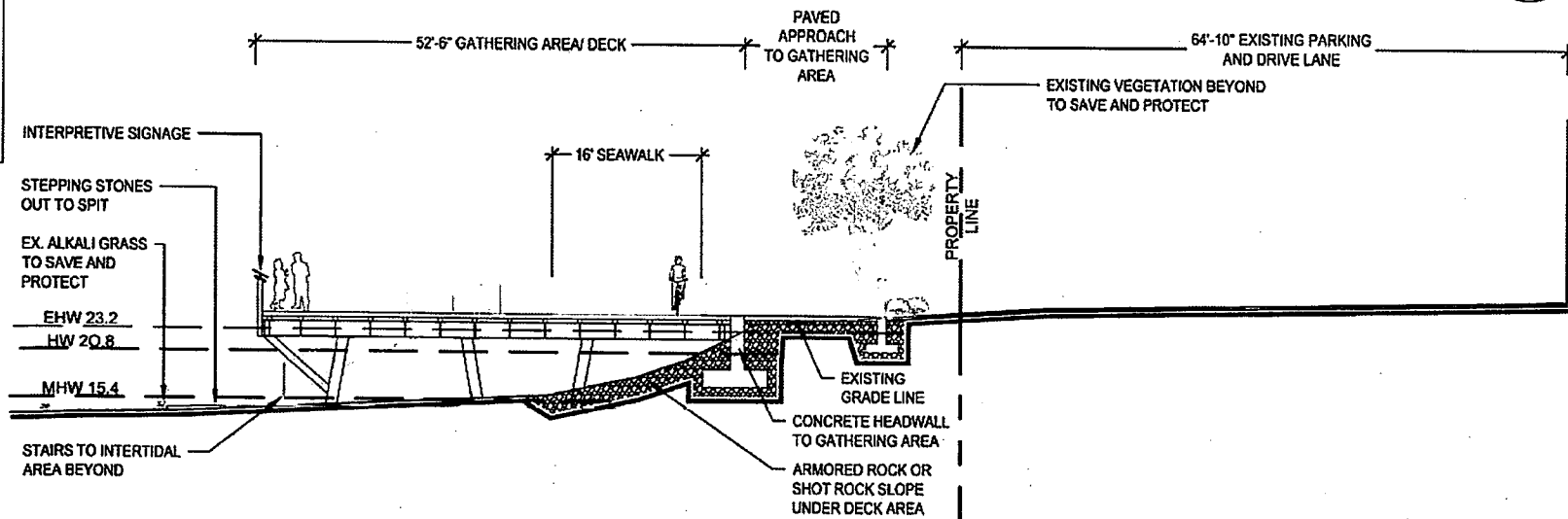
PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 12 OF 17, DATE: JANUARY 26, 2015



Section B - SEAWALK SECTION AT DEPT. OF FISH AND GAME

SCALE: 1" = 20'-0"

B



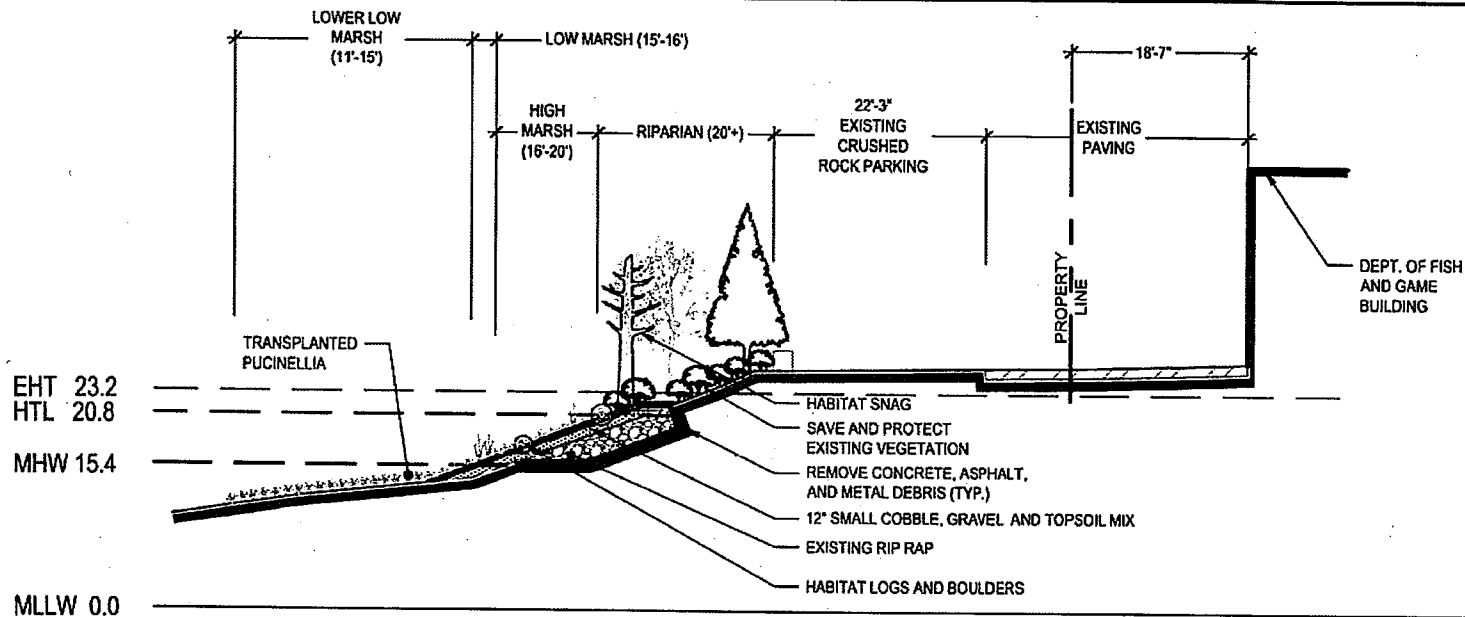
Section C - SECTION AT COASTAL INTERPRETIVE AREA

SCALE: 1" = 20'-0"

C

SITE SECTIONS

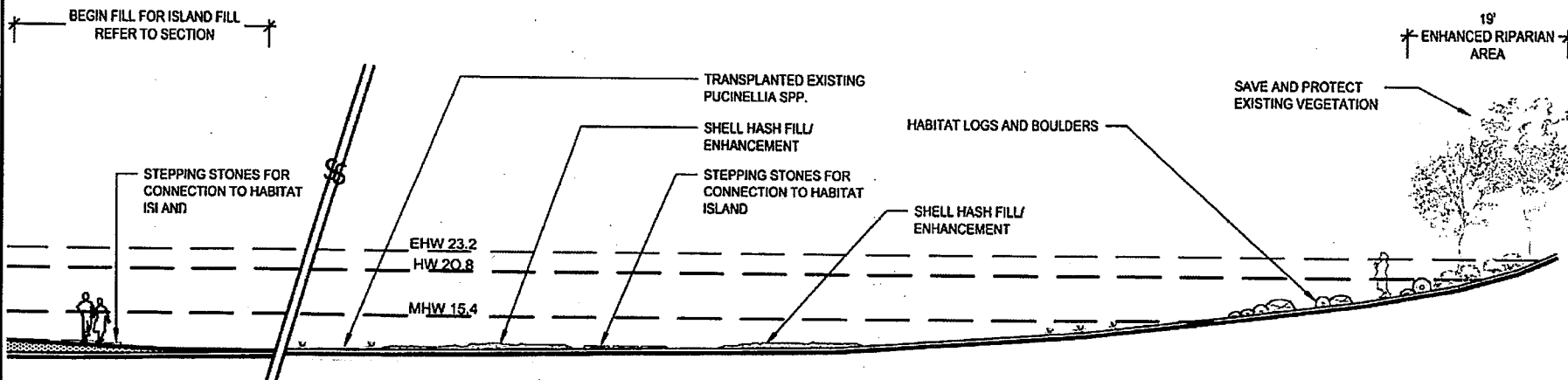
PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23, T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 13 OF 17, DATE: JANUARY 26, 2015



### Section D - RIPARIAN SECTION AT DEPT. OF FISH AND GAME

SCALE: 1" = 20'-0"

D



### Section F - SECTION AT BEACH AND ISLAND

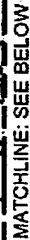
SCALE: 1" = 20'

F

SITE SECTIONS

**MATCHLINE: SEE ABOVE**

PAGE: 14 OF 17, DATE: JANUARY 26, 2015



SCALE: 1" = 40'

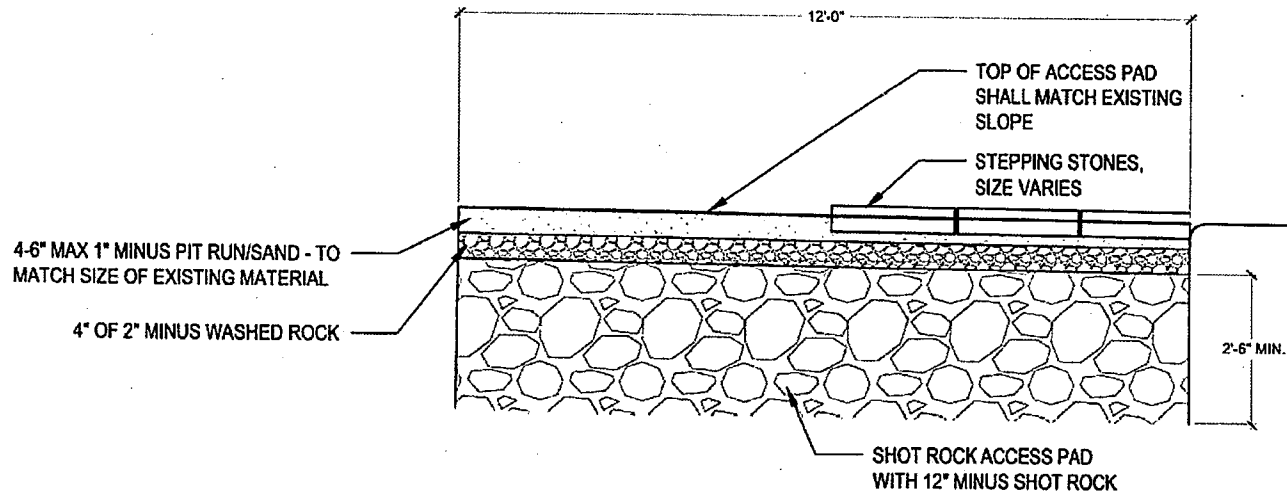
**E**

### SITE SECTION E

PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 15 OF 17, DATE: JANUARY 26, 2015

**NOTES:**

1. EXCAVATED MATERIAL SHALL BE REMOVED FROM SITE TO AN APPROVED UPLAND SITE
2. SHOT ROCK SURFACE FOR CONSTRUCTION ACCESS, INSTALL FINAL SURFACE MATERIAL AT CONCLUSION OF CONSTRUCTION ACTIVITIES



**Section G - CONSTRUCTION ACCESS PAD**

SCALE: NOT TO SCALE

G

**SITE SECTIONS**

**PERMIT NUMBER:** POA-2014-251  
**APPLICANT:** CITY AND BOROUGH OF JUNEAU  
**WATERWAY:** GASTINEAU CHANNEL  
**PROJECT NAME:** SEAWALK AND BRIDGE PARK  
**LOCATION:** SEC 23, T. 41 S., R. 67 E., CRM.  
**LAT.** 58.2988 **LONG.** -134.4230  
**PAGE:** 18 OF 17, DATE: JANUARY 28, 2015

**GASTINEAU CHANNEL**

**EXISTING HIGH TIDE LINE, 20.8**  
**PROPOSED HIGH TIDE LINE, 20.8**

**PROPOSED MHW LINE, 15.4**  
**EXISTING MLLW LINE, 0.00**

**APPROXIMATE JUNEAU NAVIGATIONAL LINE**

**DEPT. OF LABOR BLDG**  
**DEPT. OF FISH & GAME**

**TRANSPLANTED ALKALIGRASS (TYP.)**  
**HABITAT BENCH**  
**ENHANCED TIDAL POND**

**EXISTING ALKALIGRASS TO SAVE (TYP.)**  
**SNAG, TYP.**  
**OVERWATER SEAWALK**  
**TOE OF SLOPE WITH VARIABLE GRADE**  
**ROUNDED BOULDERS BEYOND TOE TO CREATE NATURAL EDGE, TYPICAL**  
**SEAWALK ON ISLAND FILL ELEVATION 25.5 +/-**  
**HABITAT BENCH**  
**TIDE POOL, TYPICAL**

**PROPOSED RESTRICTIVE COVENANT LINE**

**SEE NOTE 1**

SE WIND

PERMIT NUMBER: POA-2014-251  
 APPLICANT: CITY AND BOROUGH OF JUNEAU  
 WATERWAY: GASTINEAU CHANNEL  
 PROJECT NAME: SEAWALK AND BRIDGE PARK  
 LOCATION: SEC 23., T. 41 S., R. 67 E., CRM.,  
 LAT: 58.2986 LON: -134.4230  
 PAGE: 17 OF 17, DATE: JANUARY 26, 2015

Number	Common Name	Latin Name
1	Leafy spurge	<i>Euphorbia esula</i>
2	Purple loosestrife	<i>Lythrum salicaria</i>
3	Orange hawkweed	<i>Hieracium aurantiacum</i>
4	Canada thistle	<i>Cirsium arvense</i>
5	Perennial sowthistle	<i>Sonchus arvensis</i>
6	Whitetops and its varieties	<i>Cardaria draba</i> , <i>C. pubescens</i> , <i>Lepidium latifolium</i>
7	Russian knapweed	<i>Acroptilon repens</i>
8	Quackgrass	<i>Elymus repens</i>
9	Field bindweed	<i>Convolvulus arvensis</i>
10	Hempnettle	<i>Galeopsis tetrahit</i>
11	Galinsoga	<i>Galinsoga parviflora</i>
12	Austrian fieldcress	<i>Rorippa austriaca</i>
13	Horsenettle	<i>Solanum carolinense</i>
14	Blue-flowering lettuce	<i>Lactuca tatarica</i> , ( <i>L. pulchella</i> )
15	Japanese knotweed	<i>Polygonum cuspidatum</i> , <i>P. bohemicum</i>
16	Spotted knapweed	<i>Centaurea stoebe</i> ( <i>C. maculosa</i> )
17	Reed canarygrass	<i>Phalaris arundinacea</i>
18	Ornamental jewelweed	<i>Impatiens glandulifera</i>
19	White sweetclover	<i>Melilotus alba</i>
20	Meadow hawkweed	<i>Hieracium caespitosum</i>
21	Cheatgrass	<i>Bromus tectorum</i>
22	Siberian pea shrub	<i>Caragana arborescens</i>
23	European bird cherry	<i>Prunus padus</i>
24	Bird vetch	<i>Vicia cracca</i>
25	Garlic mustard	<i>Alliaria petiolata</i>
26	Common toadflax	<i>Linaria vulgaris</i>
27	Scotchbroom	<i>Cytisus scoparius</i>
28	Rampion bellflower	<i>Campanula rapunculoides</i>
29	Foxtail barley	<i>Hordeum jubatum</i>
30	Tansy ragwort	<i>Senecio jacobaea</i>
31	Bull thistle	<i>Cirsium vulgare</i>
32	Oxeye daisy	<i>Leucanthemum vulgare</i>
33	Common tansy	<i>Tanacetum vulgare</i>
34	Narrowleaf hawksbeard	<i>Crepis tectorum</i>
35	Splitlip hempnettle	<i>Galeopsis bifida</i>
36	Western salsify	<i>Tragopogon dubius</i>
37	Hairy catsear	<i>Hypochaeris radicata</i>

## SECTION 00853 - STANDARD DETAILS

### PART 1 - GENERAL

#### 1.1 STANDARD DETAILS

- A. Whenever references are made to the Standard Drawings or Standard Details in these plans or Specifications the intent is to refer to the current City and Borough of Juneau Standard Details (currently the 4<sup>th</sup> Edition dated August 2011), which are available on-line at the following link:

[http://www.juneau.org/engineering/Rev\\_Standards.php](http://www.juneau.org/engineering/Rev_Standards.php)

- B. City and Borough of Juneau Standard Details which specifically apply to this Project include but are not limited to the following:

#### LIST OF DETAILS

STANDARD  
DETAIL  
NO.

NAME OF DETAIL





111A	CURB AND GUTTER, TYPE I
303	STORM DRAIN MANHOLE, TYPE I
304A	CATCH BASIN, TYPE III
403	FIRE HYDRANT

**PART 2 - PRODUCTS** (Not Used)

**PART 3 - EXECUTION** (Not Used)

**END OF SECTION**

**City and Borough of Juneau  
Downtown Seawalk  
Bridge to Gold Creek  
Project No. E16-126  
Specification Professional Responsibilities**

<p>Civil  Dowl/HKM</p>		<p>Structural  Tetra Tech</p>	
<p>Landscape  JA Brennan</p>	 <p>8-12-2015</p>	<p>Piping  Tetra Tech</p>	

## SPECIAL PROVISIONS

The Standard Specifications for Civil Engineering Projects and Subdivision Improvements December 2003 Edition, with all Errata Sheets, as published by the City and Borough of Juneau, is part of these Contract Documents and shall pertain to all phases of the contract. The Standard Specifications for Civil Engineering Projects and Subdivision Improvements December 2003 Edition is available for a fee from the City and Borough of Juneau Engineering Contracts Office, (907) 586-0490, or you may view them online at: [www.juneau.org/engineering](http://www.juneau.org/engineering).

### SPECIAL PROVISIONS – TABLE OF CONTENTS

Section No.	Section Title	Page No.
SECTION 01010 – SUMMARY OF WORK		2
SECTION 01025 – MEASUREMENT AND PAYMENT		7
SECTION 01045 – CUTTING AND PATCHING		21
SECTION 01550 – SITE ACCESS AND STORAGE		23
SECTION 01700 – PROJECT CLOSE-OUT		23
SECTION 02202 – EXCAVATION AND EMBANKMENT		24
SECTION 02203 – TRENCHING		36
SECTION 02204 – BASE COURSE		37
SECTION 02205 – RIPRAP		37
SECTION 02501 – STORM SEWER PIPE		38
SECTION 02601 – WATER PIPE		38
SECTION 03300 – CAST-IN-PLACE CONCRETE		<b>Error! Bookmark not defined.</b>

## **SPECIAL PROVISIONS**

*Add the following Section:*

### **SECTION 01010 – SUMMARY OF WORK**

#### **PART 1 – GENERAL**

##### **1.1. GENERAL**

- A. The WORK to be performed under this contract shall consist of furnishing all plants, tools, equipment, materials, supplies, manufactured articles and furnishing all labor, transportation and services, including fuel, power, water, and essential communications, and performing all WORK, or other operations required for the fulfillment of the contract in strict accordance with the Contract Documents within the Contract Schedule. The WORK shall be complete, and all WORK, materials, and services not expressly indicated or called for in the Contract Documents which may be necessary for the complete and proper construction of the WORK in good faith shall be provided by the CONTRACTOR as though originally so indicated, at no increase in cost to the OWNER.

##### **1.2. WORK COVERED BY CONTRACT DOCUMENTS**

- A. The WORK as shown on the attached Drawings and specified herein consists of the sitework required for the Bridge to Gold Creek segment of the Downtown Seawalk including the sitework for Bridge Park at the northern terminus of the Seawalk. Bridge Park is located along Gastineau Channel between 8<sup>th</sup> and 9<sup>th</sup> Streets, and the Seawalk segment is located between the park to Gold Creek.
  - 1. The Seawalk sitework includes the installation of approximately 2.7 acres of intertidal fill to provide the shot rock core of an intertidal island, and additional fill for a construction access route. Some surfaces of the island will be protected with 36" minus boulders.
  - 2. Bridge Park sitework includes the installation of approximately 0.6 acres of intertidal fill to provide the base material for a small active recreation zone, a water viewing plaza, and a whale sculpture and water feature.
  - 3. Work at the Bridge Park site will also include the installation of a concrete vault that will provide a foundation for a whale sculpture and the underground piping necessary for future installation of a water feature surrounding the whale sculpture. The sculpture and water feature will be furnished and installed by others, not under this contract.
- B. Any additional work items required to complete all the WORK shown on the Drawings.
- C. SITE OF WORK. The site of the WORK is along the waterfront of downtown Juneau, Alaska, beginning at or near the Douglas Bridge on 10<sup>th</sup> Street and ending at Egan Drive near Gold Creek.

##### **1.3. BEGINNING AND COMPLETION OF THE WORK**

- A. Time is the essence of the contract. This site and adjacent downtown streets are of critical importance to commerce and traffic in Downtown Juneau. Egan Drive is the primary access to Juneau from the north, and 8<sup>th</sup> and 9<sup>th</sup> Streets are used by

## **SPECIAL PROVISIONS**

both state and private sector employees and visitors to buildings in the vicinity. All WORK shall be coordinated closely with anticipated levels of traffic.

- B. In accordance with the provisions of Article 2 of Section 00500 – Agreement, the CONTRACTOR shall begin the WORK on the date specified in the written Notice to Proceed from the OWNER, and all WORK shall be substantially completed and available for public occupancy on or before July 1, 2016. Only minor final cleanup may occur after that date. Final completion shall occur on or before July 15, 2016.
- C. Work is scheduled to commence consistent with CONTRACTOR's proposed schedule during the winter of 2015-16, with the following conditions:
  - 1. Work can begin at any time following the CONTRACTOR's compliance with all specified pre-work requirements.
  - 2. Shot Rock Borrow and 36-Inch Minus Boulders shall not be installed before March 1, 2016.
  - 3. Concrete for the whale sculpture foundation at Bridge Park shall not be installed before April 1, 2016.
  - 4. Site shall be ready to receive the Whale Sculpture July 1, 2016.
  - 5. Substantial Completion July 1, 2016.
  - 6. Final Completion: July 15, 2016
- D. No marine WORK requiring the use of major vessels, equipment or materials within the Gastineau Channel safety zone defined by CFR 165.1702 shall occur after May 1, 2016. After that time, permission to anchor within the safety zone will require express consent from the Captain of the Port, Southeast Alaska.

### **1.4. CONTRACT METHOD**

- A. The WORK hereunder shall be constructed under a Unit Price contract based on the quantities as determined by the specified measurement and payment methods defined in these Drawings and Specifications and the prices bid by the CONTRACTOR. The WORK will be awarded as a Basic Bid.

### **1.5. WORK BY OTHERS**

- A. The CONTRACTOR's attention is directed to the fact that work may be conducted at the site by other contractors during the performance of the WORK under this contract. The CONTRACTOR shall conduct its operations so as to cause a minimum of interference with the WORK of such other contractors, and shall cooperate fully with such contractors to provide continued safe access to their respective portions of the site, as required to perform work under their respective contracts.
- B. Interference With Work On Utilities: The CONTRACTOR shall cooperate fully with all utility forces of the OWNER or forces of other public or private agencies engaged in the relocation, altering, or otherwise rearranging of any facilities which interfere with the progress of the WORK, and shall schedule the WORK so as to minimize interference with said relocation, altering, or other rearranging of facilities.

## **SPECIAL PROVISIONS**

- C. The Bridge Park Sculpture and Water Feature have been designed and are being fabricated by others. Drawings and specifications of these items are provided to the Bidders with these specifications. The CONTRACTOR'S work related to the sculpture and water feature is included in Pay Items 2601.1 and 3300.1, and generally described as follows:
1. Installation of the concrete foundation and vault to support the whale sculpture. Embedded items in this structure related to the water feature shall be purchased from Wesco Fountains, Inc. and installed by the CONTRACTOR. The base plate for the sculpture will be furnished and installed by the CONTRACTOR. The sculpture will be installed by the others.
  2. Installation of the site piping for water feature for the whale sculpture. The piping shall connect to slab and wall penetrations in the whale sculpture vault and drain channel and terminate at the future pump/filter room. Installation of site piping shall be included in Pay Item 2601.1.
  3. Installation of the concrete foundation and vault shall be included in Pay Item 3300.1.
  4. Purchase and installation of the water feature embedded (or "pour") items from Wesco Fountains, Inc, shall be included in the CONTRACTOR's bid price for Pay Item 3300.1 at the price indicated in the Wesco Quotation JHP19505, dated 9-22-15, attached to these specifications. Any pipe, fittings and other appurtenances not included in the Wesco Quotation but shown on Wesco drawings shall be furnished and installed by the Contractor under Pay Item 3300.1.
  5. Installation of the sculpture pool and drain channels shown on the Wesco drawings is not included in this contract and will be performed by others in the future. This work includes:
    - a. Structural concrete channels and slabs.
    - b. Piping and embedded items related to the pool and drain channels.
    - c. Colored cementitious micro topping finish on topping concrete grout bed.
    - d. All granite curbs and cladding and associated embedments.
    - e. Pebble tile trough base and associated setting bed.
    - f. All associated caulking and accessories.

### **1.6. CONTRACTOR USE OF PROJECT SITE**

- A. The CONTRACTOR's use of the Project site shall be limited to its construction operations, including on-site storage of materials.
- B. Contractor shall coordinate construction activities in the areas of Bridge Park and Gold Creek and parking lot with property owners. The contractor shall notify the Owners and Engineer a minimum of 48 hours prior to beginning any construction activity that will affect access for parking users or to any part of the site. The Contractor shall provide access to land for the dock users at all times.

## **SPECIAL PROVISIONS**

### **1.7. OWNER USE OF THE PROJECT SITE**

- A. The OWNER may utilize all or part of the existing site during the entire period of construction for the conduct of the OWNER's normal operations. The CONTRACTOR shall cooperate and coordinate with the ENGINEER to facilitate the OWNER's operations and to minimize interference with the CONTRACTOR's operations at the same time. In any event, the OWNER shall be allowed access to the Project site during the period of construction.

### **1.8. PROJECT MEETINGS**

#### **A. Pre-Construction Conference**

- 1. Prior to the commencement of WORK at the site, a Pre-Construction Conference will be held at a mutually agreed time and place which shall be attended by the CONTRACTOR'S Project manager, its superintendent, and its Subcontractors as the CONTRACTOR deems appropriate. Other attendants will be:
  - a. ENGINEER and the Inspector.
  - b. Representatives of OWNER.
  - c. Governmental representatives as appropriate.
  - d. Others as requested by CONTRACTOR, OWNER, or ENGINEER.
- 2. Unless previously submitted to the ENGINEER, the CONTRACTOR shall bring to the Pre-Construction Conference one copy each of the following:
  - a. Plan of Operation.
  - b. Project Overview Bar Chart Schedule.
  - c. Procurement schedule of major equipment and materials and items requiring long lead time.
  - d. Shop Drawing/Sample/Substitute or "Or Equal" submittal schedule.
  - e. Name and telephone number of CONTRACTOR's Project supervisor.
  - f. Erosion Control Plan with Storm Water Pollution Prevention Plan (SWPPP).
  - g. Site Access, Material Storage, and Truck Haul route plan.
- 3. The purpose of the Pre-Construction Conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established. The complete agenda will be furnished to the CONTRACTOR prior to the meeting date.

The CONTRACTOR should be prepared to discuss all of the items listed below:

- a. Status of CONTRACTOR's insurance and bonds.
- b. CONTRACTOR's tentative schedules.

## **SPECIAL PROVISIONS**

- c. Transmittal, review, and distribution of CONTRACTOR's submittals.
  - d. Processing applications for payment.
  - e. Maintaining record documents.
  - f. Critical WORK sequencing.
  - g. Field decisions and Change Orders.
  - h. Use of Project site, office and storage areas, security, housekeeping, and OWNER's needs.
  - i. Major equipment deliveries and priorities.
  - j. CONTRACTOR's assignments for safety and first aid.
4. The OWNER will preside at the Pre-Construction Conference and will arrange for keeping and distributing the minutes to all persons in attendance.
  5. The CONTRACTOR and its Subcontractors should plan on the conference taking no less than 3 hours. Items listed in paragraph 3 will be covered, as well as a review of Drawings and Specifications with the ENGINEER and OWNER.

### **B. Progress Meetings**

1. The CONTRACTOR shall schedule and hold regular on-site progress meetings at least weekly and at other times as requested by the ENGINEER or OWNER, or as required by progress of the WORK. The CONTRACTOR, ENGINEER, and all Subcontractors active on the site must attend each meeting. CONTRACTOR may at its discretion request attendance by representatives of its suppliers, manufacturers, and other Subcontractors.
2. The ENGINEER shall preside at the meetings and will arrange for keeping and distributing the minutes. The purpose of the meetings will be to review the progress of the WORK, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop. During each meeting, the CONTRACTOR is required to present any issues which may impact his work, with a view to resolve these issues expeditiously.

### **1.9. PERMITTING**

- A. The OWNER has obtained Department of Army Permit No. POA-2014-251 for this project. The authorizing letter is attached to this specification. The contractor shall comply with the requirements of the authorization letter and all other applicable permits.

### **1.10. DEFINITIONS APPLICABLE TO TECHNICAL SPECIFICATIONS**

- A. The following words have the meaning defined in the technical portions of the WORK:
  1. Furnish – means to supply and deliver to the site, to unload and unpack ready for assembly, installation, testing, and start-up.

## **SPECIAL PROVISIONS**

2. Indicated – is a word used to direct the CONTRACTOR to information contained on the drawings or in the Specifications. Terms such as “shown,” “noted,” “scheduled,” and “specified” also may be used to assist in locating information but no limitation of location is implied or intended.
3. Install – defines operations at the site including assembly, erection, placing, anchoring, applying, shaping to dimension, finishing, curing, protecting, and cleaning, ready for the OWNER’s use.
4. Installer – a person or firm engaged by the CONTRACTOR or its Subcontractor or any Subcontractor for the performance of installation, erection, or application WORK at the site. Installers must be expert in the operations they are engaged to perform.
5. Provide – is defined as furnish and install, ready for the intended use.

### **PART 2 – PRODUCTS**

(Not Used)

### **PART 3 – EXECUTION**

(Not Used)

## **END OF SECTION**

*Add the following Section:*

### **SECTION 01025 – MEASUREMENT AND PAYMENT**

#### **PART 1 – GENERAL AND DIVISION ONE PAY ITEMS**

##### **1.1. SCOPE**

- A. Payment for the various items of the Bid Schedule, as further specified herein, shall include all compensation to be received by the CONTRACTOR for furnishing all tools, equipment, supplies, and manufactured articles, and for all labor, operations, and incidentals appurtenant to the items for WORK being described, as necessary to complete the various items of the WORK all in accordance with the requirements of the Contract Documents, including all appurtenances thereto, and including all costs of permits and cost of compliance with the regulations of public agencies having jurisdiction, including Safety and Health Requirements of Occupational Safety and Health Administration of the U.S. Department of Labor (OSHA) and Occupational Safety and Health Standards of the Alaska Department of Labor, Division of Labor Standards and Safety.
- B. No separate payment will be made for any Pay Item that is not specifically set forth in the Bid Schedule, and all costs therefore shall be included in the prices named in the Bid Schedule for the various appurtenant items of WORK.
- C. In addition to the other incidental items of WORK listed elsewhere in the contract, the following items shall also be considered as incidental to other items of WORK under this contract:

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1. Maintenance of all services through the Project area including power, water, storm and sanitary sewers, garbage pickup, bus service and emergency vehicles.
  2. Repair or replacement of existing adjacent facilities including piping, landscaping, steel, timber, concrete, stone and asphalt items.
  3. Final clean-up and site restoration.
  4. All WORK necessary for coordination of work to be accomplished by the private utility companies and property owners within the Project limits.
  5. Removal and replacement of survey monuments and markers disturbed during construction, whether shown on the Drawings or not.
  6. The removal and disposal of existing fencing.
  7. Watering of the roadway as necessary for dust control.
  8. Relocation of the existing sign assemblies within the Project Limits.
  9. All connections and fittings required for storm drain piping.
  10. Adjustment of electrical box frames and covers to grade.
  11. Crack sealing all joints following paving operations.
  12. Assembly and Installation of the project sign.
  13. Decommissioning of the existing vector dump site at the end of west eighth.
  14. Delivery of the modular concrete blocks within bridge park to consolidated public works.
- D. Payment for LUMP SUM bid items will be made in accordance with the Schedule of Values for work completed and accepted by the OWNER.
1. Work performed which is payable on a lump sum basis shall be measured for payment by percentage of work completed at the time each pay request is submitted.
  2. Indirect costs, such as supervision and overheads, profit, and the general conditions specified in the Contract shall be equitably spread between each schedule of value item. No separate payment will be made to the Contractor for these items.
  3. Upon approval of Change Orders, values for items contained within those Change Orders will be incorporated into the project Schedule of Values.
- E. Methods used to measure for payment of unit price items shall comply with Alaska Department of Transportation and Public Facilities Standard Specifications for Highways, 2015 Edition, Section 109.
- F. Some Pay Items are listed on the Bid Schedule with alphanumeric suffices designating under which work category they are grouped. The measurement and payment specifications in this Section shall all apply to all Pay Items having the same basic Pay Item number regardless of its work category suffix.

### 1.2. SCHEDULE OF VALUES

- A. The Schedule of Values shall be developed as follows:

1. The CONTRACTOR shall submit a preliminary Schedule of Values for the major components of the WORK at the Preconstruction Conference.

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2. In preparing the Schedule of Values, break up the work into construction activities such that the value of each activity shall not exceed \$50,000 unless approved by the Project Representative.
3. The CONTRACTOR and the OWNER shall meet and jointly review the preliminary Schedule of Values and make any adjustments in value allocations necessary, if in the opinion of the OWNER, allocation adjustments are necessary to establish fair and reasonable allocation of values for the major WORK components. Front end loading will not be permitted. The OWNER may require inclusion of other major WORK components not included in the above listing if, in the opinion of the OWNER, such additional components are appropriate. This review and any necessary revisions shall be completed within 15 Days from the date of Notice To Proceed. The CONTRACTOR will provide a final Schedule of Values at this time.

### **1.3. CHANGES TO SCHEDULE OF VALUES**

- A. Changes to the CPM Schedule which add activities not included in the original schedule but included in the original WORK (schedule omissions) shall have values assigned as approved by the CBJ. Other activity values shall be reduced to provide equal value adjustment increases for added activities as approved by the CBJ.
- B. In the event that the CONTRACTOR and CBJ agree to make adjustments to the original Schedule of Values because of inequities discovered in the original accepted detailed Schedule of Values, increases and equal decreases to values for activities may be made.

### **1.4. MOBILIZATION (PAY ITEM NO. 1505.1) PRICE BASED ON LUMP SUM PAY UNIT**

- A. Measurement for payment for Mobilization will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
- B. Payment for Mobilization will be made at the amount shown on the Bid Schedule under Pay Item No. 1505.1, which payment will constitute full compensation for all WORK described in Section 01505 – Mobilization, as shown on the Drawings and as directed by the ENGINEER.
- C. Partial payments will be made as the WORK progresses as follows:
  1. When 5% of the total original contract amount is earned from other Pay Items, 50% of the amount bid for Mobilization, or 5% of the original contract amount, whichever is lesser, will be paid.
  2. When 10% of the total original contract amount is earned from other Pay Items, 100% of the amount bid for Mobilization, or 10% of the original contract amount, whichever is lesser, will be paid.
  3. Upon completion of all WORK on the Project, payment of any amount bid for Mobilization in excess of 10% of the total contract amount will be paid.

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- 1.5. TRAFFIC CONTROL (PAY ITEM NO. 1550.1) PRICE BASED ON LUMP SUM PAY UNIT
- A. Measurement for payment for Traffic Control will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
  - B. Payment for Traffic Control will be made at the amount shown on the Bid Schedule under Pay Item No. 1550.1, which payment will constitute full compensation for all WORK described in Section 01550 – Site Access and Storage, as shown on the Drawings, and as directed by the ENGINEER.
- 1.6. EROSION AND SEDIMENT CONTROL (PAY ITEM NO. 1570.1) PRICE BASED ON LUMP SUM PAY UNIT
- A. Measurement for payment for Erosion and Sediment Control will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
  - B. WORK under this Pay Item includes obtaining all necessary permits for storm water control as required by Alaska Department of Environmental Conservation and the Environmental Protection Agency. This includes furnishing, installing and maintaining all measures required by these permits.
  - C. Payment for Erosion and Sediment Control will be made at the amount shown on the Bid Schedule under Pay Item No. 1570.1, which payment will constitute full compensation for all WORK described in Section 01570 – Erosion and Sediment Control, as shown on the Drawings and as directed by the ENGINEER.

### **PART 2 – DIVISION TWO PAY ITEMS**

- 2.1. CLEARING AND GRUBBING (PAY ITEM NO. 2201.1) PRICE BASED ON QUANTITY, SQUARE YARD
- A. Measurement for payment for Clearing and Grubbing shall be per square yard (SY) based upon the completion of the entire WORK, as measured in place all in accordance with the requirements of the Contract Documents.
  - B. WORK under this Pay Item includes removal and disposal of debris, trees, tree clusters, stumps and brush, and other vegetation within the construction limits, as shown or described on the Drawings. Protection, reuse and transplant of native tree and shrub materials as shown on the Drawings shall be considered incidental to, and included in the payment for, this Pay Item.
  - C. Payment for Clearing and Grubbing will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2201.1, which payment will constitute full compensation for all WORK described in Section 02201 – Clearing and Grubbing, as shown on the Drawings and as directed by the ENGINEER.
- 2.2. TRANSPLANT ALKALI GRASS (PAY ITEM NO. 2201.2) PRICE BASED ON QUANTITY, SQUARE FOOT
- A. Measurement of Transplant Alkali Grass, shall be per square foot. The work shall include all materials and labor to sensitively harvest, and transplant select alkali

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grass, in accordance with the contract documents. The contractor shall note the critical early timing of this pay item.

- B. Payment of Transplant Alkali Grass will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2201.2, which payment will constitute full compensation for all WORK described in Sections 02201- Clearing and Grubbing and Section 02711 – Landscape Planting, as shown on the Drawings and as directed by the ENGINEER.
- 2.3. USABLE EXCAVATION (PAY ITEM NO. 2202.1) PRICE BASED ON QUANTITY, CUBIC YARD
- A. Measurement for payment for Usable Excavation will be based on the number of cubic yards of unclassified material actually excavated, as determined by the average end area method. Where impractical to measure by the average end area method, the ENGINEER may approve other acceptable methods involving three-dimensional measurements. Excavation outside of the lines and grades indicated in the Drawings, or without direction from the ENGINEER will not be measured for payment.
  - B. Measurement for payment may be selected by the CONTRACTOR from one of the following methods:
    - 1. From actual cross sections taken by the CONTRACTOR's surveyor, or as directed by the ENGINEER.
    - 2. The CONTRACTOR may review and utilize the ENGINEER's design earthwork quantity computations in lieu of providing its own quantity determinations.
  - C. The following will not be measured for direct payment; the cost of such WORK will be considered incidental to other WORK under the contract:
    - 1. Overburden and other spoil material from borrow sources.
    - 2. Removal of water by aeration of material to obtain required moisture content.
    - 3. Any volumes of water or other liquid material.
    - 4. Material used for the purpose other than directed.
    - 5. Site material scarified in place and not removed.
    - 6. Material excavated when benching.
    - 7. Slide or slipout material attributable to the carelessness of the CONTRACTOR.
    - 8. The volume of conserved materials stockpiled at the option of the CONTRACTOR.
  - D. Payment for Usable Excavation will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2202.1, which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment, as shown on the Drawings and as directed by the ENGINEER.

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### **2.4. UNUSABLE EXCAVATION (PAY ITEM NO. 2202.2) PRICE BASED ON QUANTITY, CUBIC YARD**

- A. Measurement for payment for Unusable Excavation will be based on the number of cubic yards of unclassified material actually excavated, as determined by the average end area method. Where impractical to measure by the average end area method, the ENGINEER may approve other acceptable methods involving three-dimensional measurements. Excavation outside of the lines and grades indicated in the Drawings, or without direction from the ENGINEER will not be measured for payment.
- B. Work under this item will include, but is not limited to, excavation for the construction access pad to the habitat island.
- C. Measurement for payment may be selected by the CONTRACTOR from one of the following methods:
  - 1. From actual cross sections taken by the CONTRACTOR's surveyor (following pavement and concrete curbing, slabs or sidewalk removal where present), with the lower limits determined by the neat line subcut limits as indicated on the Typical Sections, or as directed by the ENGINEER.
  - 2. The CONTRACTOR may review and utilize the ENGINEER's design earthwork quantity computations in lieu of providing its own quantity determinations.
- D. The following will not be measured for direct payment; the cost of such WORK will be considered incidental to other WORK under the contract:
  - 1. Overburden and other spoil material from borrow sources.
  - 2. Removal of water by aeration of material to obtain required moisture content.
  - 3. Any volumes of water or other liquid material.
  - 4. Disposal of unusable excavation as directed by the ENGINEER.
  - 5. Site material scarified in place and not removed.
  - 6. Material excavated when benching.
  - 7. Slide or slipout material attributable to the carelessness of the CONTRACTOR.
- E. Payment for Unusable Excavation will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2202.2, which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment, as shown on the Drawings and as directed by the ENGINEER.

### **2.5. 2-INCH MINUS SHOT ROCK BORROW (PAY ITEM NO. 2202.3) PRICE BASED ON QUANTITY, TON**

- A. 2-Inch Minus Shot Rock Borrow shall be measured for payment by the ton delivered and placed in accordance with the contract documents.
- B. Payment for 2-Inch Minus Shot Rock Borrow will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2202.3, which payment will constitute full compensation for all WORK described in Section 02202 –

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Excavation and Embankment, as shown on the Drawings as and as directed by the ENGINEER.

- 2.6. 8-INCH MINUS SHOT ROCK BORROW (PAY ITEM NO. 2202.4) PRICE BASED ON QUANTITY, TON
- A. 8-Inch Minus Shot Rock Borrow shall be measured for payment by the ton delivered and placed in accordance with the contract documents.
  - B. 8-Inch Minus Filter Rock shall also be measured for payment under this pay item. Any additional screening or sorting required shall be considered incidental to the WORK.
  - C. Payment for 8-Inch Minus Shot Rock Borrow will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2202.4, which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment, as shown on the Drawings as and as directed by the ENGINEER.
- 2.7. 18-INCH MINUS SHOT ROCK BORROW (PAY ITEM NO. 2202.5) PRICE BASED ON QUANTITY, TON
- A. 18-Inch Minus Shot Rock Borrow shall be measured for payment by the ton delivered and placed in accordance with the contract documents.
  - B. No deduction shall be made for material deformation or loss for material placed in accordance with the contract documents after March 1 2016. Any re-shaping and final grading prior to placement of boulders shall be incidental to this pay item.
  - C. Payment for 18-Inch Minus Shot Rock Borrow will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2202.5, which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment, as shown on the Drawings as and as directed by the ENGINEER.
- 2.8. MINING AREA RESTORATION AND ROAD CLEANING GUARANTEE (PAY ITEM NO. 2202.6) PRICE BASED ON CONTINGENT SUM PAY UNIT
- A. Measurement for this Item will be made as a Contingent Sum Pay Unit for completion of Mining Area Restoration and Road Cleaning.
  - B. The CONTRACTOR shall be responsible for removal of dirt, mud, rocks and other debris from CBJ and State Right-of-Ways accumulated from the hauling and quarry operations. It is the intent that the traveled public way be kept as clean as practical to minimize dust and to avoid unsafe traffic conditions. If the CONTRACTOR fails to perform necessary road cleaning, the CBJ may hire outside forces to perform the work and deduct the cost from this contingent sum item.
  - C. The Contractor shall be responsible for restoration of their mining area in accordance to the conditions of the material source used and mining plan submitted. If the Contractor fails to perform the required mining area restoration,

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the CBJ may hire outside forces to perform the work and deduct the cost from this contingent sum item.

- D. Release of final payment for Mining Area Restoration and Road Cleaning Guarantee will be made upon determination of completeness by the ENGINEER after deduction of OWNER incurred costs for necessary road cleaning and/or mining area restoration not completed by the CONTRACTOR.
  - E. Payment for Mining Area Restoration and Road Cleaning Guarantee will be made at the amount shown in the Bid Schedule under Pay Item No. 2202.6, with deductions as described in this article, which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment, as shown on the Drawings and as directed by the ENGINEER.
- 2.9. INDIVIDUAL MINING PLAN (PAY ITEM NO. 2202.7) PRICE BASED ON LUMP SUM PAY UNIT
- A. Measurement for payment for Individual Mining Plan will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, including preparation and approval of the Individual Mining Plan by a registered Civil Engineer in the State of Alaska, all in accordance with the requirements of the Contract Documents.
  - B. Payment for Individual Mining Plan will be made at the amount shown in the Bid Schedule under Pay Item No. 2202.7, which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment, as shown on the Drawings and as directed by the ENGINEER.
- 2.10. 36-INCH MINUS BOULDERS, NATURAL-ORIGIN (PAY ITEM NO. 2202.8) PRICE BASED ON QUANTITY, TON
- A. 36-Inch Minus Boulders, Natural-origin, shall be measured for payment by the ton delivered and placed in accordance with the contract documents. This material shall not be used to compensate for material deformation or loss for subgrade material placed in accordance with the contract documents after March 1 2016. Any re-shaping and final grading prior to placement of Boulders shall be performed using Shot Rock Borrow and considered incidental to the Shot Rock Borrow pay item.
  - B. Payment for 36-Inch Minus Boulders, Natural-origin, will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2202.8, which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment, as shown on the Drawings as and as directed by the ENGINEER.
- 2.11. 36-INCH MINUS BOULDERS, QUARRY-ORIGIN (PAY ITEM NO. 2202.9) PRICE BASED ON QUANTITY, TON
- A. 36-Inch Minus Boulders, Quarry-origin, shall be measured for payment by the ton delivered and placed in accordance with the contract documents. This material shall not be used to compensate for material deformation or loss for subgrade material placed in accordance with the contract documents after March 1 2016. Any re-shaping and final grading prior to placement of Boulders shall be

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performed using Shot Rock Borrow and considered incidental to the Shot Rock Borrow pay item.

- B. Payment for 36-Inch Minus Boulders, Quarry-origin, will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2202.9, which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment, as shown on the Drawings as and as directed by the ENGINEER.
- 2.12. BASE COURSE, GRADING D-1 (PAY ITEM NO. 2204.2) PRICE BASED ON QUANTITY, TON
- A. Base Course, Grading D-1 shall be measured by the ton, delivered and placed as directed by the ENGINEER. Measurement may include moisture up to a maximum of 7.0% of the dry weight.
  - B. Water needed for compaction and added to the base material on the grade will be considered incidental.
  - C. This Pay Item is a contingency item to be used as required for pot-hole maintenance on west eighth street and to create a walkable surface around the whale sculpture at project completion.
  - D. Payment for Base Course, Grading D-1 shall be made at the Unit Price named in the Bid Schedule under Pay Item No. 2204.2, which payment will constitute full compensation for all WORK described in Section 02202 – Excavation and Embankment and Section 02204 – Base Course, as shown on the Drawings and as directed by the ENGINEER.
- 2.13. CLASS IV RIPRAP (PAY ITEM NO. 2205.1) PRICE BASED ON QUANTITY, CUBIC YARD
- A. Measurement for payment for Class IV Riprap shall be based on the number of cubic yards in place as determined by the average end area method. Where impractical to measure by the average end area method, the ENGINEER may approve other acceptable methods involving three-dimensional measurements.
  - B. Riprap placed outside of the lines, grades and typical sections indicated in the Plans or as directed by the ENGINEER shall not be included in the quantities for pay purposes.
  - C. The volume of Class II Riprap specified at the top of the Class IV Riprap slope will also be measured for payment under this Pay Item.
  - D. Payment for Class IV Riprap will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2205.1, which payment will constitute full compensation for all WORK described in Section 02205 – Riprap, as shown on the Drawings as and as directed by the ENGINEER.

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### **2.14. 12-INCH PIPE CULVERT (PAY ITEM NO. 2501.1) PRICE BASED ON QUANTITY, LINEAR FOOT**

- A. Pipe Culvert, including all coupling bands, bends and other items necessary for the proper joining of the culvert pipe sections, will be measured by the staked length in linear feet.
- B. Pipes for storm drains shall be measured by the staked length, from center to center of structures or to ends of pipe if no structure is present. No deduction shall be made for footage through inlets, catch basins or manholes.
- C. Branch connections, coupling adapters and bends will be included in the linear foot measurement for conduit.
- D. Trench excavation, bedding, backfill and imported backfill will not be measured for payment, but will be considered incidental to other WORK.
- E. Connection to existing oil water separator CB-1 shall be incidental to this Pay Item.
- F. Payment for 12-Inch Pipe Culvert will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2501.1, which payment will constitute full compensation for all WORK described in Section 02501 – Storm Sewer Pipe, as shown on the Drawings and as directed by the ENGINEER.

### **2.15. STORM DRAIN MANHOLE, TYPE I (PAY ITEM NO. 2502.1) PRICE BASED ON QUANTITY, EACH**

- A. Storm Drain Manholes will be measured per each, complete in place to within 12 inches of finished grade, including all earthwork, and a steel plate in lieu of a frame and cover.
- B. Payment for Storm Drain Manhole, Type I, will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2502.1, which payment will constitute full compensation for all WORK described in Section 02502 – Storm Sewer Manholes, Inlets and Catch Basins, as shown on the Drawings, and as directed by the ENGINEER.

### **2.16. CATCH BASIN, TYPE III (PAY ITEM NO. 2502.2) PRICE BASED ON QUANTITY, EACH**

- A. Catch Basins will be measured per each, complete in place to within 12 inches of finished grade, including all earthwork, and a steel plate in lieu of a frame and grates.
- B. Payment for Catch Basin, Type III will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2502.2 which payment will constitute full compensation for all WORK described in Section 02502 – Storm Sewer Manholes, Inlets and Catch Basins, as shown on the Drawings and as directed by the ENGINEER.

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### **2.17. SITE PIPING FOR WHALE SCULPTURE (PAY ITEM NO. 2601.1) PRICE BASED ON LUMP SUM**

- A. Measurement for Payment for Site Piping the Whale Sculpture will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
- B. The WORK under this Item includes all piping and related work necessary to supply water to and remove water from the proposed water feature for the whale sculpture to the future pump/filter room. This WORK consists the underground piping across the site from the whale sculpture site to the location of the future pump and filtration building. This pay item shall also include all required excavation, bedding, backfill, coordination with concrete work, coordination with the water feature supplier, and all other work necessary to complete the piping systems shown on the Drawings. The 6-inch PVC underdrain crossing the Whale Sculpture piping, which is shown on the Civil Drawings, shall be included, and considered incidental to, this Pay Item No. 2601.1.
- C. Installation of piping, fittings, fixtures and appurtenances that are embedded in the concrete foundation vault for the sculpture will be installed and paid for under Pay Item No. 3300.1. Work under this Pay Item No. 2601.1 shall begin at the first flange or other piping coupling at the outside face of the concrete walls or slabs.
- D. Upper level piping to serve the future whale display system, pool and drain channels shall only be installed to a location outside the perimeter of the future pool as shown on the Drawings.
- E. Payment for Site Piping for the Whale Sculpture will be made at the amount shown in the Bid Schedule under Pay Item No. 2601.1, which payment will constitute full compensation for all WORK described in applicable sections of the Specifications and as shown on the Drawings and as directed by the ENGINEER.

### **2.18. FIRE HYDRANT ASSEMBLY (PAY ITEM NO. 2603.1) PRICE BASED ON QUANTITY, EACH**

- A. Measurement for payment of Fire Hydrant Assembly will be the actual number of fire hydrant assemblies satisfactorily installed, complete in place.
- B. A Fire Hydrant Assembly includes the fire hydrant, the tee or required fitting at the mainline water pipe, barrel extension (if required), thrust block, six-inch gate valve, valve box, joint restraints, continuity wires, thaw wires, warning tapes, and any other required fittings, including pipe, to connect the hydrant leg from the mainline water pipe to the fire hydrant or from the stubbed water pipe to the fire hydrant as shown on the Drawings.
- C. Trench excavation and backfill shall be considered incidental to other WORK under the contract.
- D. Decommissioning of the existing fire hydrant on West Ninth Street shall be considered incidental to this Pay Item. WORK includes, but is not limited to removal and disposal of existing hydrant and gate valve, and capping of existing

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service leg. WORK also includes replacing the asphalt in kind as required to perform the WORK under this Pay Item.

- E. Payment for Fire Hydrant Assembly will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2603.1, which payment will constitute full compensation for all WORK described in Section 02603 – Fire Hydrants, as shown on the Drawings and as directed by the ENGINEER.
- 2.19. 1-INCH WATER SERVICES (PAY ITEM NO. 2605.1) PRICE BASED ON LUMP SUM PAY UNIT
- A. Measurement for payment 1-Inch Water services will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
  - B. WORK will include connection to the existing fire hydrant leg on west ninth street, all curb stops, service boxes, corporation stops, stop and waste valves, , thaw wires, service saddles, fittings, warning tape, service pipe, and all WORK necessary to install the service to the locations as shown on the Drawings.
  - C. Payment for 1-Inch Water Services will be made at the amount shown in the Bid Schedule under Pay Item No. 2605.1, which payment will constitute full compensation for all WORK described in Section 02605 – Water Services, as shown on the Drawings and as directed by the ENGINEER.
- 2.20. CONSTRUCTION SURVEYING (PAY ITEM NO. 2702.1) PRICE BASED ON LUMP SUM PAY UNIT
- A. Measurement for payment of Construction Surveying will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
  - B. Payment for Construction Surveying will be made at the amount shown in the Bid Schedule under Pay Item No. 2702.1, which payment will constitute full compensation for all WORK described in Section 02702 – Construction Surveying, as shown on the Drawings and as directed by the ENGINEER.
- 2.21. STABILIZATION FABRIC (PAY ITEM NO. 2714.1) PRICE BASED ON QUANTITY, SQUARE YARD
- A. Measurement of Stabilization Fabric will be based on the actual square yards, excluding overlaps, complete in place and accepted.
  - B. Stabilization Fabric is a contingency item and shall be used only as directed by the ENGINEER. This item will be used where the Engineer determines that softer than anticipated soils are encountered resulting in greater than anticipated migration of imported fill material into the existing subgrade. Stabilization fabric shall be type C filter cloth.
  - C. Payment of Stabilization Fabric will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2714.1, which payment will constitute full compensation for all WORK described in Section 02714 – Filter Cloth, as shown on the Drawings and as directed by the ENGINEER.

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- 2.22. GEOGRID (PAY ITEM NO. 2714.2) PRICE BASED ON QUANTITY, SQUARE YARD
- A. Measurement of Geogrid will be based on the actual square yards, excluding overlaps, complete in place and accepted.
  - B. Payment of Geogrid will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2714.2, which payment will constitute full compensation for all WORK described in Section 02714 – Filter Cloth, as shown on the Drawings and as directed by the ENGINEER.
- 2.23. STORM CULVERT REMOVAL (PAY ITEM NO. 2716.1) PRICE BASED ON LUMP SUM
- A. Measurement for payment for Storm Culvert Removal will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
  - B. WORK under this Pay Item includes the removal of storm culvert within Bridge Park as shown on the Drawings.
  - C. Payment for Painted Traffic Markings will be made at the amount shown in the Bid Schedule under Pay Item No. 2716.1, which payment will constitute full compensation for all WORK described in Section 02716 – Remove and Dispose of Culvert Pipe, as shown on the Drawings and as directed by the ENGINEER.
- 2.24. STORM STRUCTURE REMOVAL (PAY ITEM NO. 2717.1) PRICE BASED ON LUMP SUM
- A. Measurement for payment for Storm Structure Removal will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
  - B. WORK under this Pay Item includes the removal of storm structures within Bridge Park as shown on the Drawings.
  - C. Payment for Painted Traffic Markings will be made at the amount shown in the Bid Schedule under Pay Item No. 2720.1, which payment will constitute full compensation for all WORK described in Section 02720 – Painted Traffic Markings, as shown on the Drawings and as directed by the ENGINEER.
- 2.25. PROJECT SIGN ASSEMBLY (PAY ITEM NO. 2718.1) PRICE BASED ON LUMP SUM PAY UNIT
- A. Measurement for payment for Project Sign Assembly will be based on the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
  - B. The sign panel will be provided by the OWNER. All other required materials shall be provided by the CONTRACTOR.
  - C. Payment for Project Sign Assembly will be made at the amount shown in the Bid Schedule under Pay Item No. 2718.1, which payment will constitute full

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compensation for all WORK described in Section 02718 – Sign Assembly, as shown on the Drawings and as directed by the ENGINEER.

### **2.26. REMOVE EXISTING ASPHALT SURFACING (PAY ITEM NO. 2806.1) PRICE BASED ON QUANTITY, SQUARE YARD**

- A. Removing asphalt surfacing will be measured for payment per square yard, complete, except that no measurement will be made for removing asphaltic surfacing less than one-inch thick.
- B. Removal of existing asphalt surfacing will be measured per top square yard, which will include the full thickness of all layers of existing asphalt up to 4-inches thick.
- C. Payment of Remove Existing Asphalt Surfacing will be made at the Unit Price named in the Bid Schedule under Pay Item No. 2806.1, which payment will constitute full compensation for all WORK described in Section 02806 – Remove Existing Asphalt Surfacing, as shown on the Drawings and as directed by the ENGINEER.

## **PART 3 – DIVISION THREE PAY ITEMS**

### **3.1. CONCRETE FOUNDATION FOR THE WHALE SCULPTURE (PAY ITEM NO. 3300.1) PRICE BASED ON LUMP SUM**

- A. Measurement for Payment for Concrete Foundation for the Whale Sculpture will be based upon the completion of the entire WORK as a Lump Sum Pay Unit, complete, all in accordance with the requirements of the Contract Documents.
- B. The WORK under this Item includes all concrete and reinforcing bars as shown on the Drawings relating to the Whale Sculpture foundation and vault below the Whale Sculpture, inclusive of all required excavation, embedded piping items (“pour” items to be purchased from Wesco, Inc.), blockouts, grating, grating support, waterstops, expansion joints, construction joints, and all typical expenditures related to the WORK.
- C. Embedded items including piping, fittings, fixtures and appurtenances, shall be furnished and installed under this Pay Item No. 3300.1. Specialty water feature items shall be purchased from Wesco under the attached Quotation JHP19505, dated 9-22-15. Items in the Wesco quotation not required for the concrete foundation vault shall be delivered to the CBJ for future phases of the project. Embedded items shown on the Wesco drawings but not included in the Wesco quotation shall be obtained by the Contractor from other sources.
- D. Payment for Concrete Foundation for the Whale Sculpture will be made at the amount shown in the Bid Schedule under Pay Item No. 3300.1, which payment will constitute full compensation for all WORK described in Section 03300 – Cast-in-place concrete, and as shown on the Drawings and as directed by the ENGINEER.

## **END OF SECTION**

## **SPECIAL PROVISIONS**

**Add** the following section:

### **SECTION 01045 – CUTTING AND PATCHING**

#### **PART 1 – GENERAL**

##### **1.1. DEFINITION**

- A. “Cutting and Patching” is defined to include the cutting and patching of nominally completed and previously existing concrete, steel, wood and miscellaneous metal structures; piping and pavement, in order to accommodate the coordination of WORK, or the installation of other facilities or structures or to uncover other facilities and structures for access or inspection, or to obtain samples for testing, or for similar purposes.
- B. “Cutting and Patching” also includes the demolition and removal of structures or portions of structures necessary to complete the WORK. Removal shall include the transportation and disposal of all removed material to appropriate disposal site(s) that conform to all applicable laws and regulations. Unless specific disposal site(s) are indicated on the Drawings, the CONTRACTOR shall be responsible for determining, locating and obtaining access and applicable permits for use of any proposed sites, at no cost to the OWNER.
- C. “Cutting and Patching” also includes the relocation of existing handrails where shown on the Drawings, including any additional bolts and fasteners and components that may be required for the installation.

##### **1.2. REQUIREMENTS OF STRUCTURAL WORK**

- A. Structural WORK shall not be cut and patched in a manner resulting in a reduction of load-carrying capacity or load/deflection ratio.
- B. Prior to cutting and patching the following categories of WORK, the CONTRACTOR shall obtain the ENGINEER’s approval to proceed with:
  - 1. Structural steel
  - 2. Miscellaneous structural metals, including equipment supports, stair systems and similar categories of work
  - 3. Structural concrete
  - 4. Foundation construction
  - 5. Timber and primary wood framing
  - 6. Bearing and retaining walls
  - 7. Structural decking
  - 8. Asphalt pavement, concrete or asphalt curb/gutter, and concrete sidewalk

##### **1.3. OPERATIONAL AND SAFETY LIMITATIONS**

- A. The CONTRACTOR shall not cut and patch operational elements and safety-related components in a manner resulting in a reduction of capacities to perform in the manner intended or resulting in decreased operational life, increased maintenance, or decreased safety.
- B. Prior to cutting and patching the following categories of WORK, the CONTRACTOR shall obtain the ENGINEER’s approval to proceed with:

## **SPECIAL PROVISIONS**

1. Sheeting, shoring and cross bracing
2. Operating systems and equipment
3. Water, moisture, vapor, air, smoke barriers, membranes and flashing
4. Noise and vibration control elements and systems
5. Control, communication, conveying and electrical wiring systems

### **1.4. VISUAL REQUIREMENTS**

- A. The CONTRACTOR shall not cut and patch WORK which is exposed on the exterior or exposed in occupied spaces, in a manner resulting in a reduction of visual qualities or resulting in substantial evidence of the cut and patch WORK, both as judged solely by the ENGINEER. The CONTRACTOR shall remove and replace WORK judged by the ENGINEER to have been cut and patched in a visually unsatisfactory manner.

### **1.5. APPROVALS**

- A. Where prior approval of cutting and patching is required, the CONTRACTOR shall submit the request and obtain approval prior to performing the WORK. The request should include a description of why cutting and patching cannot reasonably be avoided; how it will be performed; how structural elements (if any) will be reinforced; products to be used; firms and tradespeople who will perform the WORK; approximate dates of the WORK; and anticipated results in terms of structural, operational, and visual variations from the original WORK.

## **PART 2 – PRODUCTS**

### **2.1. MATERIALS USED IN CUTTING AND PATCHING**

- A. Except as otherwise indicated, the CONTRACTOR shall provide materials for cutting and patching which will result in equal-or-better WORK than the WORK being cut and patched, in terms of performance characteristics and including visual effects where applicable. The CONTRACTOR shall use material identical with the original materials where feasible.
- B. Materials shall comply with the requirements of the Technical Specifications wherever applicable.

## **PART 3 – EXECUTION**

### **3.1. PREPARATION**

- A. The CONTRACTOR shall provide adequate temporary support for WORK to be cut to prevent failure.
- B. The CONTRACTOR shall provide adequate protection of other WORK during cutting and patching.

### **3.2. INSTALLATION**

- A. The CONTRACTOR shall employ skilled tradespeople to perform cutting and patching. Except as otherwise indicated, the CONTRACTOR shall proceed with cutting and patching at the earliest feasible time and perform the WORK promptly.

## **SPECIAL PROVISIONS**

- B. The CONTRACTOR shall use methods least likely to damage WORK to be retained and WORK adjoining.
  - 1. In general, where physical cutting action is required, the CONTRACTOR shall cut WORK with sawing and grinding tools, not with hammering and chopping tools. Openings through concrete work shall be core-drilled.
  - 2. Comply with the requirements of Technical Specifications wherever applicable.
  - 3. Comply with the requirements of applicable sections of Division 2 where cutting and patching requires excavation and backfill.
- C. The CONTRACTOR shall patch with seams which are as invisible as possible and comply with specified tolerances for the WORK.
- D. The CONTRACTOR shall restore exposed seams of patched area; and, where necessary, extend finish restoration onto retained WORK adjoining, in a manner which will eliminate evidence of patching.

### **END OF SECTION**

## **SECTION 01550 – SITE ACCESS AND STORAGE**

### **PART 1 – GENERAL**

#### **ARTICLE 1.3, MAINTENANCE OF TRAFFIC**

*Revise paragraph M. to read:*

- M. Special pedestrian detours are often necessary in areas adjacent to new construction due to demolition of existing sidewalks and other structures. The CONTRACTOR shall provide smooth, graded pathways free of mud, muck, and other materials that will be objectionable to people in street shoes. The pathways shall be a minimum of 36-inches-wide, and shall be clearly marked with staking, warning ribbons, or other methods to guide pedestrians through the construction areas. Orange plastic fencing with metal posts shall be used for pedestrian control.

## **SECTION 01700 – PROJECT CLOSE-OUT**

### **PART 1 – GENERAL**

#### **ARTICLE 1.3, FINAL SUBMITTALS**

- A. Paragraph A.

*Replace the following sub-paragraph:*

- 6. Compliance Certificate and Release, signed by the CONTRACTOR, shall be delivered to the Engineering Contract Administrator.

## **SPECIAL PROVISIONS**

ARTICLE 1.3, FINAL SUBMITTALS. *Add the following paragraph:*

- B. Before final payment, the CONTRACTOR shall provide the Engineering Contract Administrator with clearance from the Alaska Department of Labor and Workforce Development for the CONTRACTOR and all Subcontractors that have worked on the Project. Clearance documents shall include:
  - 1. Employment Security Tax Clearance. This clearance shall indicate that all Employment Security Taxes have been paid. A sample form for this purpose is at the end of Section 00800 – Supplementary General Conditions.
  - 2. The CONTRACTOR shall submit an approved Alaska Department of Labor and Workforce Development Notice of Completion of Public Works.

*Add the following Article:*

### **1.5. PROJECT SIGN ASSEMBLY REMOVAL**

- A. The Project sign assembly shall be removed and the Project sign panel delivered to the CBJ Project Manager, as directed by the ENGINEER.
- B. No progress payments will be processed by the OWNER after the CONTRACTOR has been directed by the ENGINEER to remove and deliver the Project sign panel to the CBJ, until the Project sign panel has been received by the CBJ.

## **END OF SECTION**

## **SECTION 02202 – EXCAVATION AND EMBANKMENT**

*Replace this section in its entirety with the following Section 02202:*

### **PART 1 – GENERAL**

#### **1.1 DESCRIPTION**

- A. The WORK under this Section includes providing all labor, materials, tools and equipment necessary for excavation and embankment construction to the lines, grades and cross sections indicated in the Drawings or as directed by the ENGINEER.

#### **1.2 SUBMITTALS**

- A. Select Borrow – sample for gradation analysis.
- B. Subbase Grading A – samples for gradation analysis.
- C. Shot Rock Borrow – samples for gradation and/or visual analysis.

## SPECIAL PROVISIONS

- D. Natural-origin and quarry-origin 36-inch Minus Boulders – Sources, physical property test results, gradation samples and test results.

### PART 2 – PRODUCTS

#### 2.1 EXCAVATION

- A. All excavation shall be unclassified excavation, and shall consist of excavation and disposal of all materials, of whatever character, encountered in the WORK.

#### 2.2 EMBANKMENT

- A. Material for embankment construction shall consist of non-frost-susceptible earth, sand, gravel, fractured rock or combination thereof containing no muck, peat, frozen materials, roots, sod or other deleterious materials, and shall be compactable to the density required by the Specifications.

#### 2.3 SELECTED EMBANKMENT

- A. Selected Embankment shall meet all the requirements for Embankment Material, and in addition, shall have a plasticity index not greater than 6 as determined by AASHTO T 90 and shall contain no more than 6% by weight of material passing the 200 mesh sieve. The percentage of material passing the 200 mesh sieve shall be determined using only the material which passes a 3 inch sieve.

#### 2.4 SUBBASE, GRADING A

- A. Subbase, Grading A shall conform to the following gradation:

SIEVE DESIGNATION	PERCENT PASSING BY WEIGHT
4-Inch	100
2-Inch	85 - 100
No. 4	30-70
No. 200*	6 Max.

*\*Gradation shall be determined on that portion passing the 3-inch screen*

- B. The amount of No. 200 material shall have no more than 3% by weight less than the 0.02 mm size.
- C. Subbase, Grading A, shall contain no muck, frozen material, roots, sod or other deleterious matter. It shall have a liquid limit not greater than 25 and plasticity index not greater than 6 as determined by AASHTO T 89 and T 90.
- D. Subbase, Grading A, shall meet the quality requirements of AASHTO M 147 except that ATM T-1 and T-7 will be substituted for AASHTO T 11, T 27, and T 88.

## **SPECIAL PROVISIONS**

### **2.5 BORROW**

- A. Borrow shall meet the requirements for Embankment above.

### **2.6 SELECTED BORROW**

- A. Selected Borrow shall meet the requirements for Selected Embankment above.

### **2.7 SHOT ROCK BORROW**

- A. Shot Rock Borrow shall consist of 10-inch minus shot rock and shall contain no mulch, frozen material, roots, sod or other deleterious matter. The shot rock borrow shall be evenly graded, with at least 10% by weight retained on the 8-inch screen. Shot rock will be obtained from quarry rock, unless otherwise approved by the ENGINEER.
- B. Shot Rock Borrow shall have a plasticity index not greater than 6, as determined by AASHTO T90. It shall consist of not more than 6% by weight of particles that pass the No. 200 sieve as determined by ATM T-7. The percent of minus No. 200 material will be determined on minus 3-inch material.
- C. At least 50% by weight of the particles retained on the 3/8-inch sieve shall have at least two fractured faces as determined by ATM T-4.
- D. Elongation Specification:  
The length of the crushed stone backfill shall not be more than twice the designated screen dimensions.
- E. Sodium Sulfate Loss:  
Aggregate shall pass the percent sodium sulfate loss per AASHTO T 104 with 9% maximum.
- F. LA Abrasion:  
Percent of wear per AASHTO T 96 shall be 45% maximum.
- G. Shot Rock Borrow for this project shall have a maximum Nordic Abrasion value of 22. Test procedure for Nordic Abrasion is Alaska Test Method 312. This is available at the CBJ Engineering Department and State of Alaska Department of Transportation and Public Facilities Southeast Region Materials Laboratory.

### **2.8 2-INCH MINUS SHOT ROCK**

- A. 2-Inch Minus Shot Rock shall contain no mulch, frozen material, roots sod or other deleterious matter, and shall be obtained from a rock quarry, unless approved otherwise by the ENGINEER.
- B. The shot rock shall have a plasticity index not greater than 6, as determined by AASHTO T 90. It shall consist of not more than 3% by weight of particles that pass the No. 200 sieve, as determined by ATM T-7.

## **SPECIAL PROVISIONS**

- C. At least 50% by weight of the particles retained on the 3/8-inch sieve shall have at least two fractured faces as determined by ATM T-4.
  - D. At least 70% by weight of particles shall be retained on the 1-inch sieve and 100% shall pass the 2-inch sieve.
  - E. Elongation Specifications:  
The length of the crushed stone backfill shall not be more than twice the designated screen dimensions.
  - F. Sodium Sulfate Loss:  
Aggregate shall pass the percent sodium sulfate loss per AASHTO T 104 with 9% maximum.
  - G. LA Abrasion:  
Percent of wear per AASHTO T 96 shall be 45% maximum.
  - H. 2-Inch Minus Shot Rock for this Project shall have a maximum Nordic Abrasion value of 22. Test procedure for Nordic Abrasion is Alaska Test Method 312. This is available at the CBJ Engineering Department and State of Alaska Department of Transportation and Public Facilities Southeast Region Materials Laboratory.
- 2.9. 8-INCH MINUS SHOT ROCK BORROW
- A. 8-Inch Minus Shot Rock Borrow shall consist of 8-inch minus shot rock and shall contain no mulch, frozen material, roots, sod or other deleterious matter. The shot rock borrow shall be evenly graded, with at least 20% by weight retained on the 6-inch screen.
  - B. Shot Rock Borrow shall have a plasticity index not greater than 6, as determined by AASHTO T90. It shall consist of not more than 6% by weight of particles that pass the No. 200 sieve as determined by ATM T-7. The percent of minus No. 200 material will be determined on minus 3-inch material.
  - C. At least 50% by weight of the particles retained on the 3/8-inch sieve shall have at least two fractured faces as determined by ATM T-4.
  - D. Elongation Specification:  
The length of the crushed stone backfill shall not be more than twice the designated screen dimensions.
  - E. Sodium Sulfate Loss:  
Aggregate shall pass the percent sodium sulfate loss per AASHTO T 104 with 9% maximum.
  - F. LA Abrasion:  
Percent of wear per AASHTO T 96 shall be 45% maximum.

## **SPECIAL PROVISIONS**

- G. 8-Inch Shot Rock Borrow for this project shall have a maximum Nordic Abrasion value of 22. Test procedure for Nordic Abrasion is Alaska Test Method 312. This is available at the CBJ Engineering Department and State of Alaska Department of Transportation and Public Facilities Southeast Region Materials Laboratory.
- H. The 8-Inch Minus Shot Rock Filter layer beneath the class IV riprap shall meet all of the requirements for 8-Inch Minus Shot Rock listed above, but will also retain between 50% and 90% by weight on the 4-inch screen.

### **2.10. 18-INCH MINUS SHOT ROCK BORROW**

- A. 18-Inch Minus Shot Rock Borrow shall consist of 18-inch minus shot rock and shall contain no mulch, frozen material, roots, sod or other deleterious matter. The shot rock borrow shall be evenly graded, with at least 20% by weight retained on the 12-inch screen.
- B. Shot Rock Borrow shall have a plasticity index not greater than 6, as determined by AASHTO T90. It shall consist of not more than 6% by weight of particles that pass the No. 200 sieve as determined by ATM T-7. The percent of minus No. 200 material will be determined on minus 3-inch material.
- C. At least 50% by weight of the particles retained on the 3/8-inch sieve shall have at least two fractured faces as determined by ATM T-4.
- D. Elongation Specification:
- E. The length of the crushed stone backfill shall not be more than twice the designated screen dimensions.
- F. Sodium Sulfate Loss:
- G. Aggregate shall pass the percent sodium sulfate loss per AASHTO T 104 with 9% maximum.
- H. LA Abrasion:
- I. Percent of wear per AASHTO T 96 shall be 45% maximum.
- J. 18-Inch Shot Rock Borrow for this project shall have a maximum Nordic Abrasion value of 22. Test procedure for Nordic Abrasion is Alaska Test Method 312. This is available at the CBJ Engineering Department and State of Alaska Department of Transportation and Public Facilities Southeast Region Materials Laboratory.

### **2.11 USABLE MATERIAL FROM EXCAVATION.**

- A. Usable material from excavation shall meet the requirements for Embankment.

### **2.12 36-INCH MINUS BOULDERS**

- A. Boulders shall be defined as follows: Rounded, subrounded, or subangular large stone material with gradation specified herein. Construction requires special placement and grading. Boulders may originate from natural or quarried sources,

## SPECIAL PROVISIONS

but at least 2,000 tons shall be of natural origin having rounded or subrounded angularity, as defined by ASTM D2488.

- B. Sources: The Engineer has determined that acceptable sources are available for at least a portion of the rounded and subrounded Boulders in the Juneau area. One such source is the Montana Creek Pit operated by Alaska Juneau Contractors. Subangular Boulders can be obtained from other quarry sites that comply with these specifications. After the Contractor has identified sources for Boulders, the Engineer will inspect the sources and identify acceptable material stockpiles for specific uses on the site.
- C. Material Properties:
1. All Boulders shall be dense, hard, sound, close grained, durable, naturally occurring rock products, shall not slake or deteriorate on exposure to the action of water or atmosphere, and shall be free from overburden material and have no man-made or environmental contaminants. Materials shall be processed to remove clay, loam, alkali, organic matter, or other deleterious matter prior to delivery to the project site.
  2. Physical Properties. Boulders shall have the following physical properties:

Test	Required Value	Test Method
Specific Gravity	>2.65	ASTM C127
Water Absorption	<2.7%	ASTM C127
Sodium Sulfate Soundness	<10% loss (after 5 cycles)	ASTM C88
L.A. Abrasion	<20% loss (after 500 revolutions)	ASTM C535
Unconfined Compressive Strength	>12,000 psi	ASTM D2938

3. Gradation.
  - a. A minimum of one gradation test shall be performed for each 3,000 tons of Boulders from each proposed source. If variations in gradation appear evident to the Engineer at any time during construction, additional gradation tests may be required.
  - b. Gradation shall be tested by weighing not less than 30 representative stones.
  - c. Each proposed source of Boulders shall have the following gradation:

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36 Inch Minus Rounded Boulders:

Stone Weight (lbs.)	Percent Smaller by Weight
3,000	100
1,700	50-85
850	15-50
350	5-15
125	0-5

D. Basis of Acceptance:

1. Within fourteen (14) days following Notice to Proceed, the Contractor shall submit a description of proposed Boulder sources and any available test reports on the physical properties and gradation of the proposed material.
2. Based on the Contractor's submittal and physical inspection of the proposed material sources, the Engineer will accept or reject the sources. If any sources are rejected, the Contractor may perform additional testing to verify compliance the specifications or propose alternative sources. All testing will be at the Contractor's expense and considered incidental to the Boulder pay item.
3. After or simultaneously with inspection of proposed sources, the Contractor shall perform the required gradation tests and the Engineer will identify acceptable material stockpiles for both the natural origin and quarry-source Boulders.

### PART 3 – EXECUTION

#### 3.1 EXCAVATION

- A. Clearing and grubbing in excavation areas must be completed prior to beginning excavation operations.
- B. Excavations shall be reasonably smooth and uniform to the lines, grades and cross sections shown in the Drawings or as directed by the ENGINEER. Excavations shall be conducted to ensure that material outside of excavation limits remains undisturbed.
- C. Excavations shall be protected from erosion and maintained to drain freely at all times.
- D. Excavation in rock shall be to a minimum depth of 12 inches below the top of the finished surface within the limits, unless otherwise shown in the Contract

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Documents. Undrained pockets shall not be left in the excavated surface of the rock.

- E. When excavation to the limits indicated on the Drawings encounters unsuitable underlying material, the ENGINEER may require the CONTRACTOR to remove the unsuitable material and backfill with approved material. The CONTRACTOR shall take the necessary cross section measurements before backfill is placed in order to measure the amount of unsuitable material removed.
- F. Excavated soils that do not meet the requirements for embankment material and surplus suitable excavation shall be disposed of by the CONTRACTOR at a location and in a manner approved by the ENGINEER. No material may be wasted without the prior approval of the ENGINEER.
- G. The CONTRACTOR is responsible for securing a waste disposal site if none is indicated on the Drawings. The CONTRACTOR shall obtain the written permission of the landowner for use of all disposal sites, and shall either obtain any required permits or assure that they have been obtained by others. If required by the ENGINEER, the CONTRACTOR shall furnish the permit numbers of all required permits for the disposal sites. The costs of securing such sites shall be borne by the CONTRACTOR.
- H. Waste areas shall be uniformly graded to drain, with the outer limits feathered to blend with the existing ground. Waste areas shall be seeded, capped with suitable material, or otherwise protected from long-term erosion.
- I. All excavated soils that meet the requirements for embankment material shall be placed in the embankment up to a distance of 300-feet from the point of excavation, prior to importing borrow. If the CONTRACTOR places more borrow, or selected borrow than is required and thereby causes a waste of useable excavation, the amount of such waste shall be deducted from the borrow quantity for purposes of payment.
- J. Temporary storage of useable or suitable excavation is the responsibility of the CONTRACTOR, and no additional payment will be made.
- K. The CONTRACTOR shall conduct all operations to prevent contaminating useable excavation with unsuitable material.
- L. When frozen material is excavated and meets all other requirements for embankment material, it shall be allowed to thaw and drain prior to placing in the embankment. This material will be considered useable excavation and no additional payment will be made.
- M. All organic material shall be removed to a depth of five (5) feet within the road prism and pavement structure, unless otherwise shown in the Contract Documents, or as directed by the ENGINEER.

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- N. The CONTRACTOR shall provide added care when excavating adjacent to existing retaining walls, fences and houses. Damage caused to existing walls, fences and houses by the CONTRACTOR shall be repaired at the CONTRACTOR's expense.
- O. After excavation to the subcut limit is complete and prior to placing separation and reinforcement fabric, if required, and backfilling with Borrow, Selected Borrow or Shot Rock Borrow, the bottom of the subcut shall be compacted with an excavator or backhoe-mounted vibrating compactor until a firm base for the backfill material is obtained.

### **3.2 EMBANKMENT**

- A. Embankments shall be constructed to a reasonably smooth and uniform shape conforming to the lines, grades and cross sections indicated on the Drawings or as directed by the ENGINEER.
- B. The underlying ground shall be properly prepared prior to placing embankment material. Clearing and Grubbing in embankment areas must be completed prior to embankment operations. Debris shall be removed and surface depressions or holes shall be filled with suitable material to a level uniform surface and compacted before the embankment is constructed.
- C. When embankment is to be placed on hillsides steeper than a 4:1 slope, new embankment is to be placed alongside existing embankments, or embankments are to be built half width at a time; the foundation shall first be prepared by constructing benches of sufficient width to accommodate placing and compacting equipment. Each bench shall begin at the intersection of the original ground and the vertical side of the previous cut. Material so excavated and suitable for embankment construction shall be incorporated into the new embankment. Benching is incidental to other items in the contract and no direct payment will be made therefor.
- D. Wherever an existing compacted roadway surface containing granular material lies within three (3) feet of the new embankment surface, such existing roadway shall be scarified to a depth of six (6) inches and incorporated into the first layer of embankment.
- E. Rocks, broken concrete or other solid materials shall not be placed in embankment areas where piling is to be placed or driven, or where culvert placement is required.
- F. When frozen soils are encountered in clearing or stripping operations preparatory to the placement of embankment, or in the excavation, or in undercuts in excavation areas, the ENGINEER shall require timely placement of the backfill or embankment materials, if such action is deemed essential to minimize deterioration or degradation of the foundation material. Embankment shall not be placed over seasonally frozen ground except when written permission is received.

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- G. When excavation is performed at a season of the year when freezing weather is imminent, the CONTRACTOR shall place the specified backfill promptly, following the excavation WORK, at least up to a level which will allow the surface to adequately drain. In order to assume compliance, the ENGINEER may require that arrangements be made for the timely availability of such embankment or backfill materials prior to commencement of the stripping or excavation operations.
- H. If embankment can be deposited on only one side of abutments, wing walls, piers or culvert headwalls, care shall be taken that the area immediately adjacent to the structure is not compacted to the extent that it will cause the overturning of, or excessive pressure against the structure.
- I. When embankment is to be placed on both sides of a concrete wall or box-type structure, operations shall be so conducted that the embankment is always at approximately the same elevation on both sides of the structure.
- J. The finish subgrade surface (bottom of base course level) shall not vary more than 0.05-foot when tested using a ten foot straightedge, nor vary more than 0.05-foot from the established grade. The bottom of subgrade surface shall not vary more than 0.10-foot from the established grade.
- K. If continued hauling over a completed or partially completed embankment causes loss of stability as evidenced by pumping or rutting, or other damage, the CONTRACTOR shall repair the damaged embankment at its own expense and adjust its hauling equipment and procedures so as to avoid further damage.

### **3.3 EMBANKMENTS CONSTRUCTED WITH MOISTURE DENSITY CONTROL**

- A. Except for embankments constructed predominantly of rock fragments or boulders, all embankments shall be constructed with moisture density control. Embankments shall be placed in horizontal layers not to exceed eight inches in depth, loose measurement, for the full width of the embankment, except as required for traffic, and shall be compacted before the next layer is placed. A smaller depth will be required if the compaction equipment is considered by the ENGINEER to be insufficient to obtain the required densities. Embankments shall be compacted at the approximate optimum moisture content to not less than 95% of the maximum density as determined by AASHTO T 180 D or Alaska T-12. Embankment materials may require drying or moistening to bring the moisture content near to optimum. In place field densities will be determined by Alaska T-3 or T-11. Sufficient time shall be allowed between placement of layers to allow for field density tests.

### **3.4 EMBANKMENTS CONSTRUCTED FROM ROCK FRAGMENTS**

- A. When embankment material consists predominantly of rock fragments or boulders too large to be contained in the lift thickness specified without crushing or further fracturing, such material may be placed in lifts not exceeding in

## **SPECIAL PROVISIONS**

thickness the approximate average size of the larger rocks, or two feet, whichever is less.

- B. This material shall not be dumped in final position but shall be deposited on the fill and distributed by blading or dozing so that voids, packets and bridging will be reduced to a minimum. Intervening spaces and interstices shall be filled with smaller stones and earth to form a dense, well compacted embankment. Hauling equipment shall be uniformly routed over the entire width of the embankment, and compaction equipment shall be utilized if necessary to assure that a well-compacted embankment is obtained.
- C. Shot Rock Borrow may be placed within the embankment in a single lift where 24-inches or less. Embankments over 24-inches shall be placed in lifts not exceeding 24-inches.
- D. All rock embankment surfaces shall be rolled full width with as many passes of a vibratory roller as required to obtain a solid mass of interlocking rock fragments, prior to placement of subsequent layers of material.
- E. The surface of the shot rock borrow shall be sealed with fines from the shot rock materials, or shall have imported clean sand or other non-frost susceptible material used to seal the surface, as approved by the ENGINEER, before placement of the 2-inch minus shot rock base course. This work shall be considered incidental to other WORK under the contract.

### **3.5 OBLITERATION OF ROADWAYS**

- A. Obliteration of roadways shall include all grading operations necessary to incorporate the roadway into the new roadway and surroundings in order to provide a pleasing appearance from the new roadway. Ditches not required for drainage courses shall be filled and the roadway shall be rough graded so as to restore approximately the original contour of the ground.

### **3.6 SIDESLOPES AND DITCH GRADING**

- A. Sideslopes and Ditch Grading shall include all excavation, backfill, embankment construction, compaction, grading, and other work necessary to construct drainage swales, ditches, berms, and roadway sideslopes outside the edge of roadway, or outside other areas to be covered by asphalt pavement or concrete, as shown on the Drawings, in these Specifications, or as directed by the ENGINEER.
  - 1. All areas beyond the roadway and 2-foot shoulders that are disturbed during construction shall be graded to a smooth, uniform grade and appearance, free of humps or low areas that cause standing water in excess of 1-inch in depth.
  - 2. Sideslopes and Ditch Grading, which will include all grading of areas beyond the back of the 2-foot roadway shoulder and shall extend to the

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limits shown on the Drawings, or to the limits necessary to restore the driveways and disturbed areas to preconstruction conditions or better as shown on the Drawings or as directed by the ENGINEER.

### **3.8 INDIVIDUAL MINING PLAN**

- A. If the CONTRACTOR decides to use material from the CBJ/State Lemon Creek Borrow Pit or Stablers Point Rock Quarry, the CONTRACTOR shall provide an Individual Mining Plan that conforms to the requirements of Section 00700 - General Conditions, Article 4.6.
- B. The Individual Mining Plan shall be developed using the survey information provided by the OWNER, or the CONTRACTOR may provide an independent survey with 2-foot contours of the Pit and Quarry property. The survey shall provide sufficient survey information to calculate quantities, show drainage features and property boundaries. If the CONTRACTOR uses the OWNER furnished survey information, the Individual Mining Plan shall be done in AutoCAD format.

### **3.9 INSTALLATION OF BOULDERS**

- A. All materials shall be placed in a manner that minimizes disturbance to the shot rock base layer and to the native bottom surface. The Contractor shall identify any special methods required to preserve the alkali grass and other vegetation as indicated on the Drawings and in applicable permits.
- B. Stone shall be delivered to the project site for installation by methods that will minimize multiple re-handling of the materials to minimize breakage. Acceptance of stone gradations will be provided by the Engineer based on in-place materials. If excessive breakage occurs so that in-place required gradations are not being provided, the installed material may be rejected by the Engineer which will require the Contractor to remove and replace the installed materials.
- C. The 36-inch Minus Boulders shall be placed in Regions #1 and #5 of the Habitat Island as shown on the Drawings. A minimum of 2,000 tons of natural-origin, rounded to subrounded Boulders shall be placed in Region #1 on the habitat island as directed by the Engineer. Subangular, quarry-origin Boulders may be used in Region #5 and other locations as directed by the Engineer.
  - 1. Boulders shall be mechanically placed, embedded in the native bottom surface and embedded and interlocked into the shot rock base in such manner that will produce a well-keyed mass of stone with maximum level of stone interlocking.
  - 2. Placement of stone shall start at the toe of the structure and progress up the slope, diagonally across the face of the structure. Placing of stone by methods that will likely cause segregation of various sizes will not be permitted. Stone shall be firmly set and well supported by underlying and adjacent stones to resist displacement and provide a uniform and compact section.

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3. All stone shall be placed by clamshell bucket, stone grab, excavator bucket with thumb, or other similar method that will not drop or cast the stone, but rather release the stone in such a manner that they interlock with the underlying or adjacent stones to resist displacement. Rearranging of individual stones may be required to the extent necessary to secure the results specified. Any area in the completed construction which contains unacceptable segregation of stone sizes shall be excavated, removed from the site of the work, and replaced with specified material.
  4. Mechanically compact finished areas of placed stone using an excavator bucket or similar technique approved by the Engineer. Stone shall not be placed when the placement area is inundated by water. Equipment shall not track across the finished Boulder surface.
- D. The installation of material shall be constructed to form a uniform layer having a final thickness as specified on the Drawings. The finished top profile shall be within the following tolerances:
1. Vertical: +/- 0.5 feet from the final surface elevation shown on the Drawings.
  2. Horizontal: +/- 3 feet laterally in any 50-foot section of the Region boundaries shown on the Drawings.
- E. The Contractor shall utilize placement methods that will minimize the potential for re-suspending bottom sediment and excessive mixing of the shore restoration material with the bottom surface sediment. Equipment used for shore grading shall not operate during periods when the working surface is inundated by water.
- F. Final acceptance of finished shore surface will be determined from post-construction and progress surveys. Slope lines, grades, and placement of material will be inspected by the Engineer. At any time, the Engineer may inspect placed material for size gradation and may conduct independent verification surveys, for which the Contractor shall provide adequate access and time to complete prior to placement of subsequent material layers.

### **END OF SECTION**

## **SECTION 02203 – TRENCHING**

### **PART 2 – MATERIALS**

#### **ARTICLE 2.2 BEDDING**

*Add paragraph D as follows:*

- D. Flowable Fill Bedding shall be a sand cement mixture capable of flowing around the installed piping fully filling all voids and curing to a strength equal to or greater than the surrounding undisturbed or compacted soils. Flowable Fill Bedding shall have a cured strength of 100 psi to 200 psi and be able to be removed by mechanical equipment after curing. The Contractor shall submit a mix design that lists the sand, cement and water content as well as all proposed admixtures and air entrainment.

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### **PART 3 – EXECUTION**

#### **ARTICLE 3.2 BEDDING**

*Add paragraph E as follows:*

**E. Flowable Fill Bedding:**

1. Flowable Fill Bedding shall be installed in a firm, stable trench of undisturbed soil, or of compacted import where over excavation has occurred. Piping shall be firmly braced and anchored before the bedding is placed. Duct spacers shall be used to maintain pipe spacing and the pipes shall be anchored and/or filled to prevent floating. The trench shall be adequately formed or contained to prevent the bedding from flowing to other portions of the site. The Contractor shall provide the Engineer with 24 hours before placing the bedding and allow adequate access and time for inspection.
2. After placement of the bedding, the Contractor shall not load the bedding until it has cured to a compressive strength equal to or greater than compacted soil. Compressive strength of the bedding shall be a minimum of 100 psi before backfill is placed on the bedding and compacted. Compressive strength shall be determined by either ASTM C 403 or ASTM D 6024.

#### **END OF SECTION**

### **SECTION 02204 – BASE COURSE**

#### **PART 2 – PRODUCTS**

##### **ARTICLE 2.1 MATERIALS**

*Add the following paragraph:*

- E.** Base course for this project shall have a maximum Nordic Abrasion Value of 18, as determined by ATM 312, and shall meet the gradation requirements for grading D-1.

#### **END OF SECTION**

### **SECTION 02205 – RIPRAP**

#### **PART 2 – PRODUCTS**

##### **ARTICLE 2.1 MATERIALS**

*Add the following to paragraph A.:*

Class IV

No more than 10% of the stones by total weight shall weigh more than 1,400 pounds per piece, and no more than 15% of the stones by total weight shall weigh

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less than 25 pounds per piece. The stones shall be evenly graded and a minimum of 50% by weight of the stones shall weigh 700 pounds or more per piece.

### **END OF SECTION**

## **SECTION 02501 – STORM SEWER PIPE**

## **SECTION 02601 – WATER PIPE**

### **PART 2 – PRODUCTS**

#### **ARTICLE 2.1, PIPE**

*Add the following Paragraph B:*

- B. Piping and appurtenances, pipe bedding material, and other material necessary to complete the work shall meet the specifications shown on the Drawings and specified herein. Unless otherwise shown, piping shall be High Density Polyethylene (HDPE) meeting the following standards:
  - 1. Pipe Material – ASTM F714, PE 3408, Cell Classification 345464C.
  - 2. Fittings – ASTM D3261.
  - 3. Joints: Thermal Butt Fusion or Flanged.
  - 4. Flanges: In accordance with PPI Tech Document TN-38.

### **PART 3 – EXECUTION**

#### **ARTICLE 3.2, INSTALLATION**

*Add the following paragraph Q.:*

- Q. All HDPE site piping shall be installed in accordance with Section 002203 – TRENCHING, as modified, and applicable provisions of the Plastic Pipe Institute, Handbook of Polyethylene Pipe, most recent edition. Each pipe terminations at the future sculpture pool and drain channel and at the future pump/filter room shall end with a blind flange. At the Contractor's option, pipe terminations 2" and smaller may be plain ends with removable pipe plugs.

### **END OF SECTION**

*Replace Sections 03301 and 03302 with the following Section:*

## **SECTION 03300 – CAST-IN-PLACE CONCRETE**

### **PART 1 – GENERAL**

#### **1.1. SUMMARY**

- A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.

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**B. Related Sections:**

1. Section 02202 – Excavation and Embankment.
2. Section 02204 – Base Course.

**1.2. DEFINITIONS**

- A. Cementitious Materials:** Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash and other pozzolans, ground granulated blast-furnace slag, and silica fume; subject to compliance with requirements.

**1.3. SUBMITTALS**

- A. Product Data:** For each type of product indicated.
- B. Design Mixtures:** For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
1. Indicate amounts of mixing water to be withheld for later addition at Project site.
- C. Steel Reinforcement Shop Drawings:** Placing drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.
- D. Formwork Shop Drawings:** Prepared by or under the supervision of a qualified professional engineer detailing fabrication, assembly, and support of formwork.
1. **Shoring and Reshoring:** Indicate proposed schedule and sequence of stripping formwork, shoring removal, and reshoring installation and removal.
- E. Construction Joint Layout:** Indicate proposed construction joints required to construct the structure.
1. Location of construction joints is subject to approval of the Architect.
- F. Qualification Data:** For testing agency.
- G. Welding certificates.**
- H. Material Certificates:** For each of the following, signed by manufacturers:
1. Cementitious materials.
  2. Admixtures.
  3. Form materials and form-release agents.
  4. Steel reinforcement and accessories.
  5. Curing compounds.
  6. Adhesives.
  7. Joint-filler strips.
  8. Repair materials.

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- I. Material Test Reports: For the following, from a qualified testing agency, indicating compliance with requirements:
    - 1. Aggregates: Include service record data, per ASTM C 1260, indicating absence of deleterious expansion of concrete due to alkali aggregate reactivity.
  - J. Floor surface flatness and levelness measurements indicating compliance with specified tolerances.
  - K. Field quality-control reports.
  - L. Minutes of preinstallation conference.
- 1.4. QUALITY ASSURANCE
- A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACI-certified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.
  - B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.
    - 1. Manufacturer certified according to NRMCA's "Certification of Ready Mixed Concrete Production Facilities."
  - C. Testing Agency Qualifications: An independent agency, qualified according to ASTM C 1077 and ASTM E 329 for testing indicated.
    - 1. Personnel conducting field tests shall be qualified as ACI Concrete Field Testing Technician, Grade 1, according to ACI CP-1 or an equivalent certification program.
    - 2. Personnel performing laboratory tests shall be ACI-certified Concrete Strength Testing Technician and Concrete Laboratory Testing Technician – Grade I. Testing Agency laboratory supervisor shall be an ACI-certified Concrete Laboratory Testing Technician – Grade II.
  - D. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
  - E. Welding Qualifications: Qualify procedures and personnel according to AWS D1.4/D 1.4M, "Structural Welding Code – Reinforcing Steel."
  - F. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
    - 1. ACI 301, "Specifications for Structural Concrete,"
    - 2. ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
  - G. Concrete Testing Service: Engage a qualified independent testing agency to perform material evaluation tests and to design concrete mixtures.

## **SPECIAL PROVISIONS**

- H. Pre-Construction Conference: Conduct conference at Owner's office.
1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
    - a. Contractor's superintendent.
    - b. Independent testing agency responsible for concrete design mixtures.
    - c. Ready-mix concrete manufacturer.
    - d. Concrete subcontractor.
    - e. Special concrete finish subcontractor.
    - f. Owner and Architect
  2. Unless previously submitted to the ARCHITECT, the CONTRACTOR shall bring to the Pre-Construction Conference on copy each of the following:
    - a. Plan of Operation.
    - b. Project Overview Bar Chart Schedule.
    - c. Procurement schedule of major equipment and materials and items requiring long lead time.
    - d. Shop Drawing/Sample/Substitute or "Or Equal" submittal schedule.
    - e. Name and telephone number of CONTRACTOR's Project Supervisor.
    - f. Erosion Control Plan.
  3. The purpose of the Pre-Construction Conference is to designate responsible personnel and establish a working relationship. Matters requiring coordination will be discussed and procedures for handling such matters established.
  4. The CONTRACTOR should be prepared to discuss all of the items listed below:
    - a. Status of CONTRACTOR's insurance and bonds.
    - b. CONTRACTOR's tentative schedules.
    - c. Transmittal, review, and distribution of CONTRACTOR's submittals.
    - d. Processing applications for payment.
    - e. Maintaining record documents.
    - f. Critical work sequencing.
    - g. Field decisions and Change Orders.
    - h. Use of Project site, office and storage areas, security, housekeeping, and OWNER's needs.
    - i. Major equipment deliveries and priorities.
    - j. CONTRACTOR's assignments for safety and first aid.
  5. The OWNER will preside at the Pre-Construction Conference and will arrange for keeping and distribution the minutes to all persons in attendance.

## **SPECIAL PROVISIONS**

### **I. Progress Meetings**

1. The CONTRACTOR shall schedule and hold regular on-site progress meetings at least weekly and at other times as requested by the Engineer, or as required by progress of the WORK. The CONTRACTOR, ARCHITECTS, and all Subcontractors active on the site must attend each meeting. CONTRACTOR may at its discretion request attendance by representatives of its suppliers, manufacturers, and other Subcontractors.
2. The Engineer shall preside at the meetings and will arrange for keeping and distributing the minutes. The purpose of the meetings will be to review the progress of the WORK, maintain coordination of efforts, discuss changes in scheduling, and resolve other problems which may develop. During each meeting, the CONTRACTOR is required to present any issues which may impact the WORK, with a view toward resolving these issues expeditiously.

### **1.5. DELIVERY, STORAGE, AND HANDLING**

- A. Steel Reinforcement: Deliver, store, and handle steel reinforcement to prevent bending and damage.

## **PART 2 – PRODUCTS**

### **2.1. FORM-FACING MATERIALS**

- A. Smooth-Formed Finished Concrete: Form-facing panels that will provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
  1. Plywood, metal, or other approved panel materials.
  2. Exterior-grade plywood panels, suitable for concrete forms, complying with DOC PS 1, and as follows:
    - a. High-density overlay, Class 1 or better.
    - b. Medium-density overlay, Class 1 or better; mill-release agent treated and edge sealed.
    - c. Structural 1, B-B or better; mill oiled and edge sealed.
    - d. B-B (Concrete Form), Class 1 or better; mill oiled and edge sealed.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Void Forms: Biodegradable paper surface, treated for moisture resistance, structurally sufficient to support weight of plastic concrete and other superimposed loads.
- D. Chamfer Strips: Wood, metal, PVC, or rubber strips, 3/4 by 3/4 inch, minimum.

## **SPECIAL PROVISIONS**

- E. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and will not impair subsequent treatments of concrete surfaces.
  - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- F. Form Ties: Factory-fabricated, removable or snap-off metal or glass-fiber-reinforced plastic form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
  - 1. Furnish units that will leave no corrodible metal closer than 1 inch to the plane of exposed concrete surface.
  - 2. Furnish ties that, when removed, will leave holes no larger than 1 inch in diameter in concrete surface.
  - 3. Furnish ties with integral water-barrier plates to walls indicated to receive dampproofing or waterproofing.

### **2.2. STEEL REINFORCEMENT**

- A. Recycled Content of Steel Products: Provide products with an average recycled content of steel products so postconsumer recycled content plus one-half of preconsumer recycled content is not less than 25 percent.
- B. Reinforcing Bars: ASTM A 615/A 615M, Grade 60, deformed.
- C. Low-Alloy-Steel Reinforcing Bars: ASTM A 706/A 706M, deformed.
- D. Plain-Steel Wire: ASTM A 82/A 82M.
- E. Deformed-Steel Wire: ASTM A 496/A 496M.

### **2.3. REINFORCEMENT ACCESSORIES**

- A. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60, plain-steel bars, cut true to length with ends square and free of burrs.
- B. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete and as follows:
  - 1. For concrete surfaces exposed to view where legs of wire bar supports contact forms, use CRSI Class 1 plastic-protected steel wire or CRSI Class 2 stainless-steel bar supports.

### **2.4. CONCRETE MATERIALS**

- A. Cementitious Material: Use the following cementitious materials, of the same type, brand, and source, throughout Project:
  - 1. Portland Cement: ASTM C 150, Type I, Type III gray. Supplement with the following:

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- a. Fly Ash: ASTM C 618, Class F.
    - b. Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120.
  2. Blended Hydraulic Cement: ASTM C 595, Type IS, Portland blast-furnace slag cement.
  - B. Silica Fume: ASTM C 1240, amorphous silica.
  - C. Normal-Weight Aggregates: ASTM C 33, Class 3S coarse aggregate or better, graded. Provide aggregates from a single source.
    1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.
    2. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
  - D. Water: ASTM C 94/C 94M and potable.
- 2.5. ADMIXTURES
- A. Air-Entraining Admixture: ASTM C 260.
  - B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.
    1. Water-Reducing Admixture: ASTM C 494/C 494M, Type A.
    2. Retarding Admixture: ASTM C 494/C 494M, Type B.
    3. Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type D.
    4. High-Range, Water-Reducing Admixture: ASTM C 494/C 494M, Type F.
    5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494/C 494M, Type G.
    6. Plasticizing and Retarding Admixture: ASTM C 1017/C 1017M, Type II.
  - C. Set-Accelerating Corrosion-Inhibiting Admixture: Commercially formulated, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete and complying with ASTM C 494/C 494M, Type C.
    1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
      - a. Axim Italcementi Group, Inc.; CATEXOL CN-CI.
      - b. BASF Construction Chemicals – Building Systems; Rheocrete CNI.
      - c. Euclid Chemical Company (The), an RPM company; ARRMATECT.
      - d. Grace Construction Products, W. R. Grace & Co.; DCI.
      - e. Sika Corporation; Sika CNI.

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- D. Non-Set-Accelerating Corrosion-Inhibiting Admixture: Commercially formulated, non-set-accelerating, anodic inhibitor or mixed cathodic and anodic inhibitor; capable of forming a protective barrier and minimizing chloride reactions with steel reinforcement in concrete.
1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
- a. BASF Construction Chemicals – Building Systems; Rheocrete 222+.
  - b. Cortec Corporation; MCI- 2000.
  - c. Grace Construction Products, W. R. Grace & Co.; DCI-S.
  - d. Sika Corporation; FerroGard 901.

### 2.6. CURING MATERIALS

- A. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
- a. Axim Italcementi Group, Inc.; CATEXOL CimFilm.
  - b. BASF Construction Chemicals – Building Systems; Confilm.
  - c. ChemMasters; SprayFilm.
  - d. Conspec by Dayton Superior; Aquafilm.
  - e. Dayton Superior Corporation; Sure Film (J-74).
  - f. Edoco by Dayton Superior; BurkeFilm.
  - g. Euclid Chemical Company (The), an RPM company; Eucobar.
  - h. Kaufman Products, Inc.; Vapor-Aid.
  - i. Lambert Corporation; LAMBCO Skin.
  - j. L&M Construction Chemicals, Inc.; E-CON.
  - k. Meadows, W. R., Inc.; EVAPRE.
  - l. Metalcrete Industries; Waterhold.
  - m. Nox-Crete Products Group; MONOFILM.
  - n. Sika Corporation; SikaFilm.
  - o. SpecChem, LLC; Spec Film.
  - p. Symons by Dayton Superior; Finishing Aid.
  - q. TK Products, Division of Sierra Corporation; TK-2120 TRI-FILM.
  - r. Unitex; PRO-FILM.
  - s. Vexcon Chemicals, Inc.; Certi-Vex Envio Set.
- B. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- C. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- D. Water: Potable.

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- E. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating.
  - 1. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following:
    - a. Anti-Hydro International, Inc.; AH Curing Compound #2 DR WB.
    - b. BASF Construction Chemicals – Building Systems; Kure 200.
    - c. ChemMasters; Safe-Cure Clear.
    - d. Conspec by Dayton Superior; W.B. Resin Cure.
    - e. Dayton Superior Corporation; Day-Chem Rez Cure (J-11-W).
    - f. Edoco by Dayton Superior; Res X Cure WB.
    - g. Euclid Chemical Company (The), an RPM company; Kurez W VOX; TAMMSCURE WB 30C.
    - h. Kaufman Products, Inc.; Thinfilm 420.
    - i. Lambert Corporation; AQUA KURE – CLEAR.
    - j. L&M Construction Chemicals, Inc.; L&M Cure R.
    - k. Meadows, W. R., Inc.; 1100-CLEAR.
    - l. Nox-Crete Products Group; Resin Cure E.
    - m. Right Pointe; Clear Water Resin.
    - n. SpecChem, LLC; Spec Rez Clear.
    - o. Symons by Dayton Superior; Resi-Chem Clear.
    - p. TK Products, Division of Sierra Corporation; TK-2519 DC WB.
    - q. Vexcon Chemicals, Inc.; Certi-Vex Enviocure 100.

### **2.7. RELATED MATERIALS**

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.
- B. Semirigid Joint Filler: Two-component, semirigid, 100 percent solids, epoxy resin with a Type A shore durometer hardness of 80 per ASTM D 2240.
- C. Bonding Agent: ASTM C 1059/C 1059M, Type II, non-redispersible, acrylic emulsion or styrene butadiene.
- D. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade to suit requirements, and as follows:
  - 1. Types IV and V, load bearing for bonding hardened or freshly mixed concrete to hardened concrete.

### **2.8. REPAIR MATERIALS**

- A. Repair Underlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/8 inch and that can be feathered at edges to match adjacent floor elevations.
  - 1. Cement Binder: ASTM C 150, Portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.

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2. Primer: Product of underlayment manufacturer recommended for substrate, conditions, and application.
  3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by underlayment manufacturer.
  4. Compressive Strength: Not less than 4100 psi at 28 days when tested according to ASTM C 109/C 109M.
- B. Repair Overlayment: Cement-based, polymer-modified, self-leveling product that can be applied in thicknesses from 1/4 inch and that can be filled in over a scarified surface to match adjacent floor elevations.
1. Cement Binder: ASTM C 150, Portland cement or hydraulic or blended hydraulic cement as defined in ASTM C 219.
  2. Primer: Product of topping manufacturer recommended for substrate, conditions, and application.
  3. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch or coarse sand as recommended by topping manufacturer.
  4. Compressive Strength: Not less than 5000 psi at 28 days when tested according to ASTM C 109/C 109M.

### **2.9. CONCRETE MIXTURES, GENERAL**

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.
- B. Cementitious Materials: Use fly ash, pozzolan, ground granulated blast-furnace slag, and silica fume as needed to reduce the total amount of Portland cement, which would otherwise be used, by not less than 40 percent. Limit percentage, by weight, of cementitious materials other than Portland cement in concrete as follows:
1. Fly Ash: 25 percent.
  2. Combined Fly Ash and Pozzolan: 25 percent.
  3. Ground Granulated Blast-Furnace Slag: 50 percent.
  4. Combined Fly Ash or Pozzolan and Ground Granulated Blast-Furnace Slag: 50 percent Portland cement minimum, with fly ash or pozzolan not exceeding 25 percent and silica fume not exceeding 10 percent.
  5. Silica Fume: 10 percent.
  6. Combined Fly Ash, Pozzolans, and Silica Fume: 35 percent with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
  7. Combined Fly Ash or Pozzolans, Ground Granulated Blast-Furnace Slag, and Silica Fume: 50 percent with fly ash or pozzolans not exceeding 25 percent and silica fume not exceeding 10 percent.
- C. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement.

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- D.     Admixtures: Use admixtures according to manufacturer's written instructions.
1.     Use water-reducing high-range water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
  2.     Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
  3.     Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.
  4.     Use corrosion-inhibiting admixture in concrete mixtures where indicated.

### **2.10.   CONCRETE MIXTURE**

- A.     Proportion normal-weight concrete mixture as follows:
1.     Minimum Compressive Strength: 5000 psi at 28 days.
  2.     Maximum Water-Cementitious Materials Ratio: 0.40.
  3.     Slump Limit: 5 inches for concrete with verified slump of 2 to 4 inches before adding high-range water-reducing admixture or plasticizing admixture, plus or minus 1 inch.
  4.     Air Content: 6 percent, plus or minus 1.5 percent at point of delivery for 3/4-inch nominal maximum aggregate size.

### **2.11.   FABRICATING REINFORCEMENT**

- A.     Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

### **2.12.   CONCRETE MIXING**

- A.     Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M, and furnish batch ticket information.
1.     When air temperature is between 85 and 90 deg F, reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F, reduce mixing and delivery time to 60 minutes.
- B.     Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.
1.     For mixer capacity of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
  2.     For mixer capacity larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.
  3.     Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

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### **2.13. WATERSTOPS**

- A. Flexible PVC Waterstops: CE CRED-C 572, for embedding in concrete to prevent passage of fluids through joints. Factory fabricate corners, intersections, and directional changes.
  - 1. Profile: Ribbed with center bulb.
  - 2. Dimensions: 6 inches by 3/8 inch thick (150 mm by 10 mm thick); nontapered.
- B. Self-Expanding Butyl Strip Waterstops: Manufactured rectangular or trapezoidal strip, butyl rubber with sodium bentonite or other hydrophilic polymers, for adhesive bonding to concrete, 3/4 by 1 inch (19 by 25 mm).

### **2.14. EMBEDDED PIPING AND CONDUIT ITEMS**

- A. All drains, inlets, skimmers, wall and slab penetrations, and other embedded items shall be furnished as shown on the Contract Drawings and the drawings labeled "The Whale Project Water Feature", prepared by Wesco Fountains, Inc. (27 sheets) and as specified on the Wesco Quotation
- B. Provide all the pipe and conduit fittings, connections and other appurtenances necessary to complete the piping systems

## **PART 3 – EXECUTION**

### **3.1. FORMWORK**

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117.
- C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
  - 1. Class A, 1/8 inch for smooth-formed finished surfaces.
  - 2. Class C, 1/2 inch for rough-formed finished surfaces.
- D. Construct forms tight enough to prevent loss of concrete mortar.
- E. Fabricate forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
  - 1. Install keyways, reglets, recesses, and the like, for easy removal.
  - 2. Do not use rust-stained steel form-facing material.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.

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- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Chamfer exterior corners and edges of permanently exposed concrete.
- I. Form openings, chases, offsets, sinkages, keyways, reglets, blocking, screeds, and bulkheads required in the Work. Determine sizes and locations from trades providing such items.
- J. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- K. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- L. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

### **3.2. EMBEDDED ITEMS**

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
  - 1. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC's "Code of Standard Practice for Steel Buildings and Bridges."
  - 2. The CONTRACTOR shall install the embedded items in the concrete structures as shown on the Contract Drawings and the Wesco drawings. Connections to and from the sculpture vault shall be coordinated with the water feature design.

### **3.3. REMOVING AND REUSING FORMS**

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete. Concrete has to be hard enough to not be damaged by form-removal operations and curing and protection operations need to be maintained.
  - 1. Leave formwork for beam soffits, joists, slabs, and other structural elements that supports weight of concrete in place until concrete has achieved at least 70 percent of its 28-day design compressive strength.
  - 2. Remove forms only if shores have been arranged to permit removal of forms without loosening or disturbing shores.
- B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material will not be acceptable for exposed surfaces. Apply new form-release agent.

## **SPECIAL PROVISIONS**

- C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Architect.

### **3.4. SHORES AND RESHORES**

- A. Comply with ACI 318 and ACI 301 for design, installation, and removal of shoring and reshoring.
  - 1. Do not remove shoring or reshoring until measurement of slab tolerances is complete.
- B. Plan sequence of removal of shores and reshore to avoid damage to concrete. Locate and provide adequate reshoring to support construction without excessive stress or deflection.

### **3.5. STEEL REINFORCEMENT**

- A. General: Comply with CRSI's "Manual of Standard Practice" for placing reinforcement.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that would reduce bond to concrete.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
  - 1. Weld reinforcing bars according to AWS D1.4/D 1.4M, where indicated.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- E. Install welded wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

### **3.6. JOINTS**

- A. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- B. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Architect.
  - 1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
  - 2. Locate horizontal joints in walls at the top of footings.
  - 3. Space vertical joints in walls as indicated. Locate joints beside piers integral with walls, near corners, and in concealed locations where possible.

## **SPECIAL PROVISIONS**

4. Use a bonding agent at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
  5. Use epoxy-bonding adhesive at locations where fresh concrete is placed against hardened or partially hardened concrete surfaces.
- C. Doweled Joints: Install dowel bars and support assemblies at joints where indicated. Lubricate or asphalt coat one-half of dowel length to prevent concrete bonding to one side of joint.

### **3.7. CONCRETE PLACEMENT**

- A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections have been performed.
- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Architect.
- C. Before test sampling and placing concrete, water may be added at Project site, subject to limitations of ACI 301.
1. Do not add water to concrete after adding high-range water-reducing admixtures to mixture.
- D. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete will be placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
1. Deposit concrete in horizontal layers of depth to not exceed formwork design pressures and in a manner to avoid inclined construction joints.
  2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301.
  3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.
- E. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
1. When average high and low temperature is expected to fall below 40 deg F for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301.
  2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.

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3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- F. Hot-Weather Placement: Comply with ACI 301 and as follows:
1. Maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
  2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

### **3.8. FINISHING FORMED SURFACES**

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
1. Apply to concrete surfaces not exposed to public view.
- B. Rubbed Finish: Apply the following to smooth-form-finished as-cast concrete where exposed:
1. Smooth-Rubbed Finish: Not later than one day after form removal, moisten concrete surfaces and rub with carborundum brick or another abrasive until producing a uniform color and texture. Do not apply cement grout other than that created by the rubbing process.
- C. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

### **3.9. MISCELLANEOUS CONCRETE ITEMS**

- A. Filling In: Fill in holes and openings left in concrete structures after work of other trades is in place unless otherwise indicated. Mix, place, and cure concrete, as specified, to blend with in-place construction. Provide other miscellaneous concrete filling indicated or required to complete the Work.

### **3.10. CONCRETE PROTECTING AND CURING**

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 for hot-weather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

## **SPECIAL PROVISIONS**

- C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for the remainder of the curing period.
- D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.
- E. Cure concrete according to ACI 308.1, by one or a combination of the following methods:
  - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
    - a. Water.
    - b. Continuous water-fog spray.
    - c. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
  - 2. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover for curing concrete, placed in widest practicable width, with sides and ends lapped at least 12 inches, and sealed by waterproof tape or adhesive. Cure for not less than seven days. Immediately repair any holes or tears during curing period using cover material and waterproof tape.
  - 3. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
    - a. Removal: After curing period has elapsed, remove curing compound without damaging concrete surfaces by method recommended by curing compound manufacturer.

### **3.11. JOINT FILLING**

- A. Prepare, clean, and install joint filler according to manufacturer's written instructions.
  - 1. Defer joint filling until concrete has aged at least one month(s). Do not fill joints until construction traffic has permanently ceased.
- B. Remove dirt, debris, saw cuttings, curing compounds, and sealers from joints; leave contact faces of joint clean and dry.
- C. Install semirigid joint filler full depth in saw-cut joints and at least 2 inches deep in formed joints. Overfill joint and trim joint filler flush with top of joint after hardening.

## **SPECIAL PROVISIONS**

### **3.12. CONCRETE SURFACE REPAIRS**

- A. Defective Concrete: Repair and patch defective areas when approved by Architect. Remove and replace concrete that cannot be repaired and patched to Architect's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of one part Portland cement to two and one-half parts fine aggregate passing a No. 16 (1.18-mm) sieve, using only enough water for handling and placing.
- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
  - 1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension to solid concrete. Limit cut depth to 3/4 inch. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
  - 2. Repair defects on surfaces exposed to view by blending white Portland cement and standard Portland cement so that, when dry, patching mortar will match surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
  - 3. Repair defects on concealed formed surfaces that affect concrete's durability and structural performance as determined by Architect.
- D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
  - 1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
  - 2. After concrete has cured at least 14 days, correct high areas by grinding.
  - 3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
  - 4. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.

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5. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
  6. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.
- E. Perform structural repairs of concrete, subject to Architect's approval, using epoxy adhesive and patching mortar.
- F. Repair materials and installation not specified above may be used, subject to Architect's approval.

### **3.13. FIELD QUALITY CONTROL**

- A. Testing and Inspecting: OWNER shall engage a special inspector and qualified testing and inspecting agency to perform field tests and inspections and prepare test reports.
- B. Inspections:
1. Steel reinforcement placement.
  2. Steel reinforcement welding.
  3. Headed bolts and studs.
  4. Verification of use of required design mixture.
  5. Concrete placement, including conveying and depositing.
  6. Curing procedures and maintenance of curing temperature.
  7. Verification of concrete strength before removal of shores and forms from beams and footings.
- C. Concrete Tests: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements:
1. Testing Frequency: Obtain one composite sample for each day's pour of each concrete mixture exceeding 5 cu. yd., but less than 25 cu. yd., plus one set for each additional 50 cu. yd. or fraction thereof.
  2. Testing Frequency: Obtain at least one composite sample for each 100 cu. yd. or fraction thereof of each concrete mixture placed each day.
    - a. When frequency of testing will provide fewer than five compressive-strength tests for each concrete mixture, testing

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shall be conducted from at least five randomly selected batches or from each batch if fewer than five are used.

3. Slump: ASTM C 143/C 143M; one test at point of placement for each composite sample, but not less than one test for each day's pour of each concrete mixture. Perform additional tests when concrete consistency appears to change.
4. Air Content: ASTM C 231, pressure method, for normal-weight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
5. Concrete Temperature: ASTM C 1064/C 1064M; one test hourly when air temperature is 40 deg F and below and when 80 deg F and above, and one test for each composite sample.
6. Unit Weight: ASTM C 567, fresh unit weight of structural lightweight concrete; one test for each composite sample, but not less than one test for each day's pour of each concrete mixture.
7. Compression Test Specimens: ASTM C 31/C 31M.
  - a. Cast and laboratory cure two sets of two standard cylinder specimens for each composite sample.
  - b. Cast and field cure two sets of two standard cylinder specimens for each composite sample.
8. Compressive-Strength Tests: ASTM C 39/C 39M; test one set of two laboratory-cured specimens at 7 days and one set of two specimens at 28 days.
  - a. A compressive-strength test shall be the average compressive strength from a set of two specimens obtained from same composite sample and tested at age indicated.
9. Strength of each concrete mixture will be satisfactory if every average of any three consecutive compressive-strength tests equals or exceeds specified compressive strength and no compressive-strength test value falls below specified compressive strength by more than 500 psi.
10. Test results shall be reported in writing to Architect, concrete manufacturer, and Contractor within 48 hours of testing. Reports of compressive-strength tests shall contain Project identification name and number, date of concrete placement, name of concrete testing and inspecting agency, location of concrete batch in Work, design compressive strength at 28 days, concrete mixture proportions and materials, compressive breaking strength, and type of break for both 7- and 28-day tests.
11. Nondestructive Testing: Impact hammer, sonoscope, or other nondestructive device may be permitted by Architect but will not be used as sole basis for approval or rejection of concrete.
12. Additional Tests: Testing and inspecting agency shall make additional tests of concrete when test results indicate that slump, air entrainment, compressive strengths, or other requirements have not been met, as directed by Architect. Testing and inspecting agency may conduct tests

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to determine adequacy of concrete by cored cylinders complying with ASTM C 42/C 42M or by other methods as directed by Architect.

13. Additional testing and inspecting, at Contractor's expense, will be performed to determine compliance of replaced or additional work with specified requirements.
14. Correct deficiencies in the Work that test reports and inspections indicate do not comply with the Contract Documents.

### **END OF SECTION**

### **END OF SPECIAL PROVISIONS**