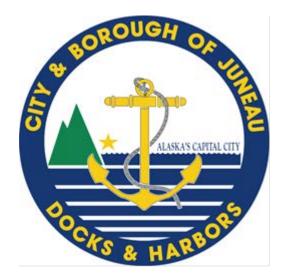
CRUISE SHIP SECURITY CHECKPOINT PHASE I

VOLUME I of II

Contract No. DH19-050



DIVISION 0 - BIDDING AND CONTRACT REQUIREMENTS, CONTRACT FORMS, AND CONDITIONS OF THE CONTRACT

BIDDING and CONTRACT REQUIREMENTS

No. of Pages

00005	Table of Contents	2
00030	Notice Inviting Bids	3
00100	Instructions to Bidders	1
00300	Bid	2
00310	Bid Schedule	1
00320	Bid Bond	1
00360	Subcontractor Report	2
00370	Contractor Financial Responsibility	3

CONTRACT FORMS

00500	Agreement	6
	Performance Bond	2
00620	Payment Bond	2

CONDITIONS OF THE CONTRACT

00700	General Conditions	44
00800	Supplementary General Conditions	6
00830	Alaska Labor Standards, Reporting, and	
	Prevailing Wage Rate Determination	1

TECHNICAL SPECIFICATIONS

010100	Summary of Work	3
010450	Cutting and Patching	2
010900	Reference Standards and Definitions	3
013000	Contractor Submittals	9
013010	Schedule of Values	3
013100	Progress Schedules	2
013110	CPM Construction Schedule	5
015300	Protection and Restoration of Existing Facilities	4
015500	Site Access and Storage	1
015600	Temporary Environmental Controls	1
016000	Materials and Equipment	4
017000	Project Closeout	5
017040	Final Clean-Up and Site Restoration	2
017320	Selective Demolition	3
051200	Structural Steel Framing	6
074200	Solid Phenolic Architectural Panels	6
085113	Aluminum Windows	6
088000	Glazing	9

SECTION 00005 - TABLE OF CONTENTS

DRAWINGS

See Cover Sheet of Drawings for Drawing Index.....

END OF SECTION

SECTION 00030 - NOTICE INVITING BIDS

OBTAINING CONTRACT DOCUMENTS. The Contract Documents are entitled:

Cruise Ship Security Checkpoint – Ph I CBJ Contract No. DH19-050

The Contract Documents may be obtained at the City & Borough of Juneau (CBJ) Engineering Department, 3rd Floor Marine View Center, upon payment of \$35 (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

PRE-BID CONFERENCE. Prospective Bidders are encouraged to attend a Pre-Bid conference of the proposed WORK, which will be conducted by the OWNER and ARCHITECT, at 10:00 a.m. on February 13, 2019, in the City and Borough of Juneau Engineering Conference Room, 3rd Floor, Marine View Center. The object of the conference is to acquaint Bidders with the bid documents and site conditions. Conference call capability will be available for the Pre-Bid meeting. Proposers intending to participate via conference call shall notify Caleb Comas in the CBJ Engineering Contracts Division, at (907) 586-0878, or contracts@juneau.org by 4:30 p.m., February 12, 2019.

DESCRIPTION OF WORK. The WORK generally consists of construction of a Security Checkpoint on the wood approach dock at the Alaska Steamship Wharf. The Security Checkpoint is a steel and glass building with sliding doors, windows, siding and roof structure; roofing; electrical work; and other associated work.

COMPLETION OF WORK.

Work Description	Completion Date
Substantial Completion	May 10, 2019
Final Completion	May 17, 2019

The CONTRACTOR's use of the Project site shall be limited to those hours that a ship is not scheduled to be docked or actively docked at the Alaska Steamship Dock during the contract period. The 2019 Cruise Ship Schedule, dated January 4, 2019, lists 7 dates that will prohibit use of the site by the CONTRACTOR. These specific dates and times are as follows:

Monday, April 29, 2019 – 2pm to 11pm Thursday, May 9, 2019 – 1pm to 10pm Sunday, May 12, 2019 – 8am to 11pm Monday, May 13, 2019 – 12pm to 11pm Tuesday, May 14, 2019 – 6am to 10pm Wednesday, May 15, 2019 – 6am to 9pm Saturday, May 18, 2019 – 12pm to 10pm

The CONTRACTOR may work outside of the hours listed above to complete the project on time. The CONTRACTOR may be required to obtain a special work hours permit from the CBJ Building Official.

DEADLINE FOR BIDDER QUESTIONS: February 19, 2019

DEADLINE FOR BIDS: Sealed bids must be received by CBJ Docks and Harbors **prior to 2:00 p.m.**, <u>Alaska Time on February 25, 2019</u>, 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 CBJ Docks and Harbors, which will establish the official time of receipt of bids. Bids will be opened immediately thereafter in the Assembly Chambers of the

SECTION 00030 - NOTICE INVITING BIDS

Municipal Building, 155 S. Seward Street, unless otherwise specified.

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

PHYSICAL LOCATION:

CBJ Docks and Harbors Port Director's Office 76 Egan Drive, 2nd Floor Juneau, AK 99801 Bid documents delivered by the <u>U.S. Postal</u> Service must be mailed to:

MAILING ADDRESS:

CBJ Docks and Harbors Port Director 155 South Seward Street Juneau, AK 99801

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

IMPORTAN	IMPORTANT NOTICE TO BIDDER			
To submit y	our Bid:			
1. Print you	r company name and address on the upper	left corner of		
your enve	elope.			
2. Complet	e this label and place it on the lower left	t corner		
of your	envelope.			
S	BID NUMBER:			
Ε	DH19-050	В		
Α	SUBJECT:	Ι		
L	CRUISE SHIP SECURITY	D		
Ε	<u>CHECKPOINT - PH I</u>			
D	DEADLINE DATE:			
	FEBRUARY 25, 2019			
	PRIOR TO 2:00PM ALASKA			
	TIME			

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

SITE OF WORK. The site of the WORK is the Alaska Steamship Wharf in Juneau, Alaska.

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, 3rd Floor, Marine View Center 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: <u>Carl J Uchytil</u> Carl Uchytil, Port Director

1/30/2019 Date

END OF SECTION

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;

- 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 owned to the OWNER per Paragraph 21.0 of this Section.
- O. Failure to submit Failure to submit <u>all</u> completed documents as required and specified on the Bid Form, Section 00300.

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.
 - 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 ARCHITECT 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 Architect 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 Architect 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.
- 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 Architect 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 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.

- 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. <u>Failure to acknowledge Addenda may render Bid non-responsive and may cause its rejection</u>.
- 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**. Substitution requests are not accepted during the bidding process. 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. <u>Oral, telegraphic, emailed, or faxed Bids will not be considered</u>. 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 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.

- **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. <u>Conditioned bids, limitations, or provisos attached to the Bid or bid modification will</u> 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.

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 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 (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 <u>seven business days</u> following notification by the CBJ of intent to award as indicated in the Posting Notice of Bids. 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.

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

BID MODIFICATION FORM

Modification Number: _____

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.

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

Name of Bidding Firm

Responsible Party Signature

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

END OF SECTION

BID TO: THE CITY AND BOROUGH OF JUNEAU

 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with the OWNER in 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

CRUISE SHIP SECURITY CHECKPOINT – PH I

CBJ Contract No. DH19-050

- 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 of time 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 his/her signature in the space provided below.

Dated:	Bidder:		_
Alaska CONTRACTOR's	By:	(Company Name)	_
Business License No:		(Signature)	
Alaska CONTRACTOR's	Printed Name:		_
License No:	Title:		_
Telephone No:	Address:	(Street or P.O. Box)	_
Fax No:		(Sueet of F.O. Box)	_
Email:		(City, State, Zip)	

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

- 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
 - Contractor Financial Responsibility Form 00370

The apparent low Bidder who fails to submit a completed Subcontractor Report within the time specified in Section 00360 – Subcontractor Report will 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.

- 11. The successful Bidder will be required to submit, within <u>ten Days (calendar)</u> 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

Bid Schedule for construction of **<u>DH19-050 Cruise Ship Security Checkpoint – Ph I</u>**, in accordance with the Contract Documents.

BID - Furnish all labor, equipment and materials for construction of a Security Checkpoint on the wood approach dock at the Alaska Steamship Wharf, and perform all WORK as described in these Contract Documents.

\$

TOTAL BID

(Price in Figures)

Date: _____

(Company Name)

END OF SECTION

Bidder:

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

CRUISE SHIP SECURITY CHECKPOINT – PH I CBJ Contract No. DH19-050

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)

By:_____

(Signature)

(SEAL)_____(Surety)
By:______(Signature)

END OF SECTION

SECTION 00360 - SUBCONTRACTOR REPORT

LIST OF SUBCONTRACTORS (AS 36.30.115)

1

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>,</u>	SUBCONTRACTOR	¹ AK Contractor <u>License No.</u>	¹ Contact Name	Type of	Contract	
	ADDRESS	² AK Business License No.	² <u>Phone No.</u>	Work	<u>Amount</u>	✓ if <u>DBE</u>
1.		12			\$	
•		۷				
2.		1			\$	
		2				
3. _		1			\$	
		2				
4.		1			\$	
		2				

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 00370 - CONTRACTOR'S FINANCIAL RESPONSIBILITY

The apparent low Bidder must complete this form and submit *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. Attach additional sheets as necessary to respond to questions.

PROJECT: CRUISE SHIP SECURITY CHECKPOINT - PH I

As the General Contractor on this project, I intend to subcontract _____% of the total value of this contract.

A. EXPERIENCE

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

[] No [] Yes If YES, explain:

2. Describe arrangements you have made to finance this work:

3. Have you had previous construction contracts or subcontracts with the City and Borough of Juneau?
[] Yes [] No

4. Describe your most recent or current contract, its completion date, and scope of work:

5. List below, and/or as an attachment to this questionnaire, other construction projects you have completed, dates of completion, scope of work, and total contract amount for each project completed in the past twelve months.

SECTION 00370 - CONTRACTOR'S FINANCIAL RESPONSIBILITY

- 6. Per Alaska Statute 36.90.210, on previous public contracts, have you ever failed to pay a subcontractor within eight working days after receiving payment from the Owner (for projects occurring within the last 3 years)?
- [] Yes [] No If yes, please attach a detailed explanation for each occurrence.

B. EQUIPMENT

1. Describe below, and/or as an attachment, the equipment you have available and intend to use for this project.

QUANTITY	MAKE	MODEL	SIZE/CAPACITY	PRESENT MARKET VALUE
	QUANTITY	QUANTITY MAKE	QUANTITY MAKE MODEL I I I I I I I I I I I I I I I I I I I I I I I I I I I I I I	QUANTITYMAKEMODELSIZE/CAPACITYIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIIII

2. Do you propose to purchase any equipment for use on this project not listed on table B-1?[] No [] Yes If YES, describe type, quantity, and approximate cost:

3. Do you propose to rent any equipment for this work not listed on table B-1?[] No [] Yes If YES, describe type and quantity:

SECTION 00370 - CONTRACTOR'S FINANCIAL RESPONSIBILITY

4. Is your bid based on firm offers for all materials necessary for this project?[] Yes [] No If NO, please explain:

I hereby certify that the above statements are true and complete.

Contractor Signature

Name and Title of Person Signing

Signature

Date

SECTION 00500 - AGREEMENT

THIS AGREEMENT is between <u>THE CITY AND BOROUGH OF JUNEAU</u> (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 OWNERS Contract Documents <u>Contract DH19-050, Cruise Ship Security Checkpoint – Ph I</u>

The WORK is generally described as follows: construction of a Security Checkpoint on the wood approach dock at the Alaska Steamship Wharf. The Security Checkpoint is a steel and glass building with sliding doors, windows, siding and roof structure; roofing; electrical work; and other associated work.

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 Description	Completion Date
Substantial Completion	May 10, 2019
Final Completion	May 17, 2019

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 proof, the OWNER and the CONTRACTOR agree that as liquidated damages for delay (but not as a penalty) the CONTRACTOR shall pay the OWNER **§1500** for each Day that expires after the completion time(s) 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 current funds 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: <u>Contract DH19-050, Cruise Ship Security</u> <u>Checkpoint – Ph I</u>, the Lump Sum amount as set forth in the Bid Schedule in the Contract Documents for this Project.

The total amount of this contract shall be	(\$	<u>),</u> except
as adjusted in accordance with the provisions of the Contract Documents.		

AGREEMENT Page 00500-1

SECTION 00500 - AGREEMENT

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 ARCHITECT 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 00030-1 to 00030-2, inclusive).
- ▶ Notice Inviting Bids (pages 00030-1 to 00030-2, inclusive).
- ▶ Instructions to Bidders (pages 00100-1 to 00100-8, 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).
- Contractor Financial Responsibility (pages 00370-1 to 00370-3, 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 00700-44, inclusive).
- Supplementary General Conditions (pages 00800-1 to 00800-5, inclusive).
- Alaska Labor Standards, Reporting, and Prevailing Wage Determination (page 00830-1).
- > Technical Specifications as listed in the Table of Contents.
- > Drawings consisting of 21 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

SECTION 00500 - AGREEMENT

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.

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

OWNER:

CONTRACTOR:

City and Borough of Juneau	
	(Company Name)
(Signature)	(Signature)
By: Duncan Rorie Watt, City & Borough Manager	By:
(Printed Name)	(Printed Name, Authority or Title)
Date:	Date:(CONTRACTOR Signature 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.

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)

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)

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

(Name of CONTRACTOR)

KNOW ALL PERSONS BY THESE PRESENTS: That we ____

	(ituile of contrateron)
a_	
	(Corporation, Partnership, Individual)
he	reinafter 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", for the penal sum
	(Owner)` (City and State)
of	dollars (\$) in
	vful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves,
ou	r 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:

Cruise Ship Security Checkpoint – Ph I CBJ Contract No. DH19-050

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

Cruise Ship Security Checkpoint – Ph I CBJ Contract No. DH19-050

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)

(Printed Name)

(Company Name)

(Mailing Address)

(City, State, Zip Code)

(Affix SURETY'S SEAL)

NOTE: If CONTRACTOR is Partnership, <u>all</u> Partners must execute bond.

CRUISE SHIP SECURITY CHECKPOINT – PH I Contract No. DH19-050 PERFORMANCE BOND Page 00610-2

Date Issued:

SECTION 00620 - PAYMENT BOND

KNOW A	ALL PERSONS BY THESE P	RESENTS: 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 <u>tl</u>	he CITY AND BOROUGH of (Owner) (Ci	JUNEAU, ALASKA hereinafter called "OWNER," for the ity and State)
penal sum of		Dollars
(\$) in lawful mor	ney of the United States, for the payment of which sum well
and truly to be n severally, firmly l		neirs, executors, administrators and successors, jointly and
		FION 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:

Cruise Ship Security Checkpoint – Ph I CBJ Contract No. DH19-050

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

Cruise Ship Security Checkpoint – Ph I CBJ Contract No. DH19-050

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)

(Printed Name)

(Company Name)

(Mailing Address)

(City, State, Zip Code)

(Affix SURETY'S SEAL)

NOTE: If CONTRACTOR is Partnership, <u>all</u> Partners must execute bond.

CRUISE SHIP SECURITY CHECKPOINT – PH I Contract No. DH19-050 Date Issued:

SECTION 00700 - GENERAL CONDITIONS

TABLE OF CONTENTS

ARTICLE 1 DEFINITIONS

ARTICLE 2 PRELIMINARY MATTERS

2.1	Delivery of Bonds/Insurance Certificates	
2.2	Copies of Documents	
2.3	Commencement of Contract Time; Notice to Proceed	
2.4	Starting the WORK	
2.5	Pre-construction Conference	
2.6	Finalizing CONTRACTOR Submittals	

ARTICLE 3 CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1	Intent
3.2	Order of Precedence of Contract Documents
3.3	Amending and Supplementing Contract Documents
3.4	Reuse of Documents

ARTICLE 4 AVAILABILITY OF LANDS; PHYSICAL CONDITIONS; REFERENCE POINTS

4.1	Availability of Lands	
4.2	Physical Conditions - Subsurface and Existing Structures	
4.3	Differing Site Conditions	
4.4	Physical Conditions - Underground Utilities	
4.5	Reference Points	
4.6	Use of the CBJ/State Lemon Creek Gravel Pit	

ARTICLE 5 BONDS AND INSURANCE

5.1	Performance, Payment and Other Bonds	00700-14
5.2	Insurance	00700-15

ARTICLE 6 CONTRACTOR'S RESPONSIBILITIES

6.1	Supervision and Superintendence	
6.2	Labor, Materials, and Equipment	00700-17
6.3	Adjusting Progress Schedule	
6.4	Substitutes or "Or Equal" Items	
6.5	Concerning Subcontractors, Suppliers and Others	00700-18
6.6	Permits	00700-18
6.7	Patent Fees and Royalties	00700-19
6.8	Laws and Regulations	00700-19

SECTION 00700 - GENERAL CONDITIONS

TABLE OF CONTENTS

ARTICLE 6 CONTRACTOR'S RESPONSIBILITIES (Cont'd.)

6.9	Taxes
6.10	Use of Premises
6.11	Safety and Protection
6.12	Shop Drawings and Samples
6.13	Continuing the WORK
6.14	Indemnification
6.15	CONTRACTOR's Daily Reports
6.16	Assignment of Contract
6.17	CONTRACTOR's Responsibility for Utility Property and Services
6.18	Operating Water System Valves
6.19	Contractor's Work Schedule Limitations 00700-23

ARTICLE 7 OTHER WORK

7.1	Related Work at Site	00700-23
7.2	Coordination	00700-23

ARTICLE 8 OWNER'S RESPONSIBILITIES

8.1	Communications	
8.2	Payments	
8.3	Lands, Easements, and Surveys	
8.4	Change Orders	
8.5	Inspections and Tests	
8.6	Suspension of WORK	
8.7	Termination of Agreement	

ARTICLE 9 ARCHITECT'S STATUS DURING CONSTRUCTION

9.1	OWNER's Representative	
9.2	Visits to Site	
9.3	Project Representation	
9.4	Clarifications and Interpretations	
9.5	Authorized Variations in WORK	
9.6	Rejecting or Accepting Defective WORK	
9.7	CONTRACTOR Submittals, Change Orders, and Payments	
9.8	Decisions on Disputes	
9.9	Limitation on ARCHITECT's Responsibilities	

TABLE OF CONTENTS

ARTICLE 10 CHANGES IN THE WORK

10.1	General)
10.2	Allowable Quantity Variations	1

ARTICLE 11 CHANGE OF CONTRACT PRICE

11.1	General	00700-27
11.2	Costs Relating to Weather	00700-28
11.3	Cost of WORK (Based on Time and Materials)	00700-28
11.4	CONTRACTOR's Fee	00700-31
11.5	Excluded Costs	00700-31

ARTICLE 12 CHANGE OF CONTRACT TIME

12.1	General	00700-32
12.2	Extensions of Time for Delay Due to Weather	00700-33

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

13.1	Warranty and Guarantee	00700-33
13.2	Access to WORK	00700-33
13.3	Inspections and Tests	00700-33
13.4	OWNER May Stop the WORK	
13.5	Correction or Removal of Defective WORK	
13.6	One Year Correction Period	
13.7	Acceptance of Defective WORK	00700-35

ARTICLE 14 PAYMENTS TO CONTRACTOR AND COMPLETION

14.1	Schedule of Values (Lump Sum Price Breakdown)	00700-35
14.2	Unit Price Bid Schedule	
14.3	Application for Progress Payment	
14.4	CONTRACTOR's Warranty of Title	
14.5	Review of Applications for Progress Payment	
14.6	Partial Utilization	
14.7	Substantial Completion	
14.8	Final Application for Payment	
14.9	Final Payment and Acceptance	
14.10	Release of Retainage and Other Deductions	
14.11	CONTRACTOR's Continuing Obligation	
14.12	Final Payment Terminates Liability of OWNER	

TABLE OF CONTENTS

ARTICLE 15 SUSPENSION OF WORK AND TERMINATION

15.1	Suspension of WORK by OWNER	00700-39
15.2	Termination of Agreement by OWNER (CONTRACTOR Default)	00700-39
15.3	Termination of Agreement by OWNER (For Convenience)	00700-39
15.4	Termination of Agreement by CONTRACTOR	00700-39

ARTICLE 16 MISCELLANEOUS

16.1	Giving Notice	
16.2	Rights In and Use of Materials Found on the WORK	
16.3	Right to Audit	
16.4	Archaeological or Historical Discoveries	
16.5	Construction Over or Adjacent to Navigable Waters	
16.6	Gratuity and Conflict of Interest	
16.7	Suits of Law Concerning the WORK	
16.8	Certified Payrolls	
16.9	Prevailing Wage Rates	
16.10	Employment Reference	
16.11	Cost Reduction Incentive	

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 a 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 ARCHITECT 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.

ARCHITECT - The ARCHITECT 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 ARCHITECT at or before the Notice to Proceed.

Architect of Record – The individual, partnership, corporation, joint-venture or other legal entity legally responsible for preparation of Design and Construction Documents for the project.

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 - City and Borough of Juneau

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 ARCHITECT, 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, Field Orders 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 or the specific date 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.

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 ARCHITECT'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 Architect of Record 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.

Field Order - A written order issued by the ARCHITECT 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:

- A. New Year's Day January 1
- B. Martin Luther King's Birthday Third Monday in January
- C. President's Day Third Monday in February
- D. Seward's Day Last Monday in March
- E. Memorial Day Last Monday in May
- F. Independence Day July 4
- G. Labor Day First Monday in September
- H. Alaska Day October 18
- I. Veteran's Day November 11
- J. Thanksgiving Day Fourth Thursday and the following Friday in November
- K. 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.

Inspector - The authorized representative of the ARCHITECT 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 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.

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 ARCHITECT 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. 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.

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

Partial Utilization - Use by the OWNER of 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.

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.

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 ARCHITECT, to illustrate some portion of the WORK.

Specifications - Same definition as for "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 Architect of Record, 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 ARCHITECT 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 - The part of the Contract Documents which make additions, deletions, or revisions to these General Conditions.

Supplier - A manufacturer, fabricator, supplier, distributor, material man, 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.

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. If no date is stated, Contract Time shall commence upon the date of the Notice to Proceed is issued.
- 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 ARCHITECT any conflict, error, or discrepancy which the CONTRACTOR may discover and shall obtain a written interpretation or clarification from the ARCHITECT before proceeding with any WORK affected thereby.
 - C. The CONTRACTOR shall submit to the ARCHITECT 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 ARCHITECT 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.
- 2.6 FINALIZING CONTRACTOR SUBMITTALS. At least 7 days before submittal of the first Application for Payment a conference attended by the CONTRACTOR, the ARCHITECT 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 it's 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.

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 ARCHITECT, OWNER, the CONTRACTOR, or the Architect of Record 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 ARCHITECT in writing at once, and the CONTRACTOR shall not proceed with the WORK affected thereby (except in an emergency as authorized by the ARCHITECT) 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 "Permittee" in these permits.
 - 2. Field Orders
 - 3. Change Orders
 - 4. ARCHITECT's written interpretations and clarifications.
 - 5. Agreement
 - 6. Addenda
 - 7. CONTRACTOR's Bid (Bid Form)
 - 8. Supplementary General Conditions
 - 9. Notice Inviting Bids
 - 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 details
- 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 ARCHITECT prior to said use; and, neither the OWNER nor the ARCHITECT 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 Architect of Record 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 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 Architect of Record 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 ARCHITECT, 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 ARCHITECT 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 ARCHITECT 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 Architect of Record 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, the OWNER and the Architect of Record shall not be responsible for the accuracy or 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 ARCHITECT 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 ARCHITECT 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, contact Alec Venechuk, CBJ Material Source Manager, at (907) 586-0874 for the current material rates.
- 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 2008-00061. 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) 586-0874.
- 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.
- 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 2008-00061 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 Gravel Pit Manager, (907) 586-0874.
- 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 ARCHITECT.
- 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 Performance and Payment Bonds, each in the amount set forth in the Supplementary General Conditions as security for the faithful performance and payment of all the CONTRACTOR's obligations under the Contract Documents. These bonds shall remain in effect at least until one year after the date of Substantial Completion except as otherwise provided by Law or Regulation or by the Contract Documents. 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.

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 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 contract.
- 4. Subcontractor's Public Liability and Property Damage Insurance and Vehicle 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 ARCHITECT, 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 ARCHITECT. The Builder's Risk policy shall insure against all risks of direct physical loss or damage to property from any external 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 ARCHITECT. 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 ARCHITECT and the ARCHITECT 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 ARCHITECT.
- 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 ARCHITECT in writing. Additional compensation will be paid the CONTRACTOR for overtime WORK only in the event extra WORK is ordered by the ARCHITECT and the Change Order specifically authorizes 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 ARCHITECT 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 ARCHITECT, 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 ARCHITECT, or any of the Architect's of Record 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 properly perform 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 ARCHITECT, does not perform the WORK in a proper and skillful manner, or is intemperate or disorderly shall, at the written request of the ARCHITECT, 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 ARCHITECT. 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 ARCHITECT 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 ARCHITECT for acceptance in accordance with the provisions in Section 01300 CONTRACTOR Submittals in the General Requirements.
- 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. The CONTRACTOR shall be responsible to the OWNER and the ARCHITECT of Record 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 ARCHTIECT nor relieve the CONTRACTOR of any liability or obligation under the contract.

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.

- 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 Architect of Record 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 Architect of Record 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 ARCHITECT. The CONTRACTOR shall indemnify, defend, and hold harmless the OWNER, the Architect of Record, 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.
- 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 Architect of Record 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 Architect of Record harmless from and against all claims, damages, losses, and

expenses (including, but not limited to, fees of Architect's of Records 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 Architect of Record, their consultants, sub-consultants, and the officers, 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 (MSDS) 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 ARCHITECT if it considers a specified product or its intended usage to be unsafe. This notification must be given to the ARCHITECT prior to the product being ordered, or if provided by some other party, prior to the product being incorporated in the WORK.

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 ARCHITECT for review, all Shop Drawings in accordance with Section 01300 CONTRACTOR Submittals in the General Requirements.
- B. The CONTRACTOR shall also submit to the ARCHITECT 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 Architect of Record, 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 Architect of Record. 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, or the Architect of Record;
 - 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.

- 5. Liability or claims arising directly or indirectly from the breach of any warranties, whether express or implied, made to the ARCHITECT, 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 OWNER and the Architect of Record for all costs and expenses, (including but not limited to fees and charges of Architects of Record, attorneys, and other professionals and court costs including all costs of appeals) incurred by the OWNER, and the Architect of Record 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 ARCHITECT and shall be submitted to the ARCHITECT at the conclusion of each WORK day. 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 ARCHITECT. The 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 ARCHITECT, 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 CONTRACTOR shall obtain the written approval of the ARCHITECT for any scheduled operation before operating any valve.

- B. The CONTRACTOR shall be responsible for all damages, both direct and consequential, to the OWNER 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 with their WORK. 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 ARCHITECT 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 ARCHITECT 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 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 ARCHITECT.
- B. The CONTRACTOR shall issue all its communications to the OWNER through the ARCHITECT.
- 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 ARCHITECT'S STATUS DURING CONSTRUCTION

- 9.1 OWNER'S REPRESENTATIVE. The ARCHITECT will be the OWNER's representative during the construction period. The duties and responsibilities and the limitations of authority of the ARCHITECT as the OWNER's representative during construction are set forth in the Contract Documents.
- 9.2 VISITS TO SITE. The ARCHITECT 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 ARCHITECT. The ARCHITECT 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 ARCHITECT may furnish an Inspector to assist in observing the performance of the WORK. The duties, responsibilities, and limitations of authority of any such Inspector and assistants will be as provided in the Supplementary General Conditions.
- 9.4 CLARIFICATIONS AND INTERPRETATIONS. The ARCHITECT will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as the ARCHITECT may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

- 9.5 AUTHORIZED VARIATIONS IN WORK. The ARCHITECT 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 OR ACCEPTING DEFECTIVE WORK. The ARCHITECT will have authority to reject or accept WORK which the ARCHITECT 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 ARCHITECT 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 ARCHITECT'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 ARCHITECT's responsibilities as to Change Orders, see Articles 10, 11, and 12.
- C. In connection with the ARCHITECT's responsibilities in respect of Applications for Payment, see Article 14.

9.8 DECISIONS ON DISPUTES

- A. The ARCHITECT 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 ARCHITECT in writing with a request for formal decision in accordance with this paragraph, which the ARCHITECT 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 ARCHITECT 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 ARCHITECT within 60 days after such occurrence unless the ARCHITECT allows an additional period of time to ascertain more accurate data in support of the claim.
- B. The rendering of a decision by the ARCHITECT 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 ARCHITECT'S RESPONSIBILITIES

- A. Neither the ARCHITECT's authority to act under this Article or other provisions of the Contract Documents nor any decision made by the ARCHITECT in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the ARCHITECT 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 ARCHITECT 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 ARCHITECT 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 ARCHITECT 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 ARCHITECT will not be responsible for the CONTRACTOR's failure to perform the WORK in accordance with the Contract Documents.
- D. The ARCHITECT 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 ARCHITECT.
 - 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 ARCHITECT, 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 ARCHITECT can direct the CONTRACTOR to proceed on the basis of Time and Materials so as to minimize the impact on and delays to the 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 Time which embody the substance of any written decision rendered by the ARCHITECT 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.

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 ARCHITECT promptly (but in no event later than 30 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 60 days after such occurrence (unless the ARCHITECT 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 ARCHITECT 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 ARCHITECT, 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 following items, and shall not include any of the costs itemized in <u>Paragraph 11.5 EXCLUDED COSTS</u>.
- 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 ARCHITECT. 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 ARCHITECT 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 ARCHITECT. The CONTRACTOR may furnish cost data which might assist the ARCHITECT in the establishment of the rental rate.
 - 1. All equipment shall, in the opinion of the ARCHITECT, be in good working condition and suitable for the purpose for which the equipment is to be used.
 - 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 ARCHITECT, 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. <u>Equipment</u>. Unless otherwise agreed to 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" available on-line at <u>http://www.equipmentwatch.com/rrbb.htm</u> or contact Equipment Watch at (800) 669-3282.
- 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.
- 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 ARCHITECT, 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 ARCHITECT, 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	
Materials	-
Equipment	.

To the sum of the costs and mark-ups provided for in this Article, one (1) percent shall be added as compensation for Bonds.

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 five (5) percent of the Subcontractor's total cost for the extra WORK. Regardless of the number of hierarchical tiers of Subcontractors, the five (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.

- A. The term "Cost of the WORK" shall not include any of the following:
 - 1. Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, architects, 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.
 - 2. Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.
 - 3. Any part of CONTRACTOR's capital expenses, including interest on CONTRACTOR's capital employed for the WORK and charges against CONTRACTOR for delinquent payments.
 - 4. 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).
 - 5. 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.

6. 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 ARCHITECT 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 ARCHITECT 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 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 ARCHITECT 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. 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 ARCHITECT 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 ARCHITECT in writing of the cause of delay and request an extension of contract time. The ARCHITECT will ascertain the facts and the extent of the delay and extend the time for completing the WORK when, in the ARCHITECT'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 ARCHITECT 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 ARCHITECT shall be given to the 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. The OWNER, ARCHITECT, Architect of Record, their consultants, subconsultants, 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 INSPECTIONS AND TESTS

- A. The CONTRACTOR shall give the ARCHITECT 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 ARCHITECT'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 ARCHITECT will make, or have made, such inspections and tests as the ARCHITECT 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 ARCHITECT, as well as the cost of subsequent re-inspection and retesting. Neither observations by the ARCHITECT 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 ARCHITECT and the CONTRACTOR.
- E. If any WORK (including the work of others anticipated under paragraph 7.1) that is to be inspected, tested, or approved is covered without written concurrence of the ARCHITECT, it must, if requested by the ARCHITECT, be uncovered for observation. Such uncovering shall be at the CONTRACTOR's expense unless the CONTRACTOR has given the ARCHITECT timely notice of the CONTRACTOR's intention to perform such test or to cover the same and the ARCHITECT has not acted with reasonable promptness in response to such notice.
- F. If any WORK is covered contrary to the written request of the ARCHITECT, it must, if requested by the ARCHITECT, be uncovered for the ARCHITECT's observation and recovered at the CONTRACTOR's expense.
- G. If the ARCHITECT considers it necessary or advisable that covered WORK be observed by the ARCHITECT or inspected or tested by others, the CONTRACTOR, at the ARCHITECT's request, shall uncover, expose, or otherwise make available for observation, inspection, or testing as the ARCHITECT 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 Architects of Record, 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, 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 ARCHITECT, 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 ARCHITECT, 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 Architects of Record, 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 Architects of Record, attorneys and other professionals will be paid by the CONTRACTOR.

- 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 ARCHITECT.
- 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 ARCHITECT 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 amount has been paid. The remaining 10% of the contract amount shall be retained until:

- 1. final inspection has been made;
- 2. completion of the project;
- 3. acceptance of the project by the OWNER and;
- 4. the OWNER has received notification from the Alaska Department of Labor that the CONTRACTOR has no outstanding wage/hour violations.
- 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 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 Project site or at another location agreed to in writing; provided, each such individual item has a value of more than \$5000 and will become a permanent part of the WORK. The Application for Payment shall also be accompanied by a bill of sale, invoice, or other documentation warranting that the CONTRACTOR has received the materials and equipment free and clear of all liens, charges, security interests, and encumbrances (which are hereinafter in these General Conditions referred to as "Liens") and evidence 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.
- 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 ARCHITECT will, within seven (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 ARCHITECT's reasons for refusing to recommend payment. In the later case, the CONTRACTOR may make the necessary corrections and resubmit the Application. If the ARCHITECT still disagrees with a portion of the Application, it will submit the Application recommending the undisputed portion of the Application to the OWNER for review and provide reasons for recommending non-payment of the disputed amount. Thirty days after presentation of the Application for Payment with the ARCHITECT'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 ARCHITECT 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 seven (7) days (with a copy to the ARCHITECT) 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.
- 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 ARCHITECT 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 ARCHITECT prepare a Notice of Completion. Within a reasonable time thereafter, the OWNER, the CONTRACTOR, and the ARCHITECT shall make an inspection of the WORK to determine the status of completion. If the ARCHITECT does not consider the WORK substantially complete, or the list of remaining WORK items to be comprehensive, the ARCHITECT will notify the CONTRACTOR in writing giving the reasons thereof. If the ARCHITECT considers the WORK substantially complete, the ARCHITECT will prepare and deliver to the OWNER, for its execution and recording, the Notice of 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 ARCHITECT 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 ARCHITECT's observation of the WORK during construction and final inspection, and the ARCHITECT's review of the final Application for Payment and accompanying documentation, all as required by the Contract Documents, the ARCHITECT is satisfied that the WORK has been completed and the CONTRACTOR's other obligations under the Contract Documents have been fulfilled, the ARCHITECT will, within 14 days after receipt of the final Application for Payment, indicate in writing the ARCHITECT'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.
 - 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 ARCHITECT, 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 ARCHITECT, 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 ARCHITECT of a notice of resumption of WORK. The CONTRACTOR shall be allowed 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 ARCHITECT'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 ARCHITECT 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 to the CONTRACTOR 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 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 ARCHITECT's approval, such stone, gravel, sand, or other material determined suitable by the ARCHITECT, 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 ARCHITECT.
- 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 ARCHITECT 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 ARCHITECT.

- 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 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 ARCHAEOLOGICAL 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 ARCHITECT. 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 ARCHITECT 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 by 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.

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 every two weeks. Before the second Friday, each CONTRACTOR and Subcontractor must file Certified Payrolls with Statements of Compliance for the previous two weeks. (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. Any 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 CONTRACTORS 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 ARCHITECT in writing, proposals for modifying the plans, specifications, or 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 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.

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. 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. <u>Standard Specifications for Civil Engineering Projects and Subdivision Improvements</u> 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 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 not available for this Project.

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

The CBJ/State Stabler's Point Rock Quarry is not available for this Project.

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. The CONTRACTOR must provide certification of proper insurance coverage and amendatory endorsements or copies of the applicable policy language affecting coverage required in this agreement to the City and Borough of Juneau. 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" for the Commercial General Liability policy and any other policies, if required in this Section. 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. **The CONTRACTOR grants a waiver of any right to subrogation against the OWNER by virtue of the payment of any loss under such insurance.** This provision applies regardless of whether or not the OWNER has received a waiver of subrogation endorsement from the insurer.

Workers' Compensation: (under Paragraph 5.2C.1 of the General Conditions) as in accordance with AS 23.30.045:

- a. State: Statutory
- b. 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.

a.	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

- 1. CONTRACTOR agrees to waive all rights of subrogation against the OWNER for WORK performed under contract.
- 2. 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.
- 2. Commercial General Liability (CGL), including products and completed operations, property damage, bodily injury and personal and advertising injury, with limits no less than \$1,000,000 each occurrence and \$2,000,000 aggregate. (under Paragraph 5.2C.2 of the General Conditions) **This insurance policy is to contain, or be endorsed to contain, additional insured status for the CBJ, its officers, officials, employees, and volunteers.** If Additional insured status is provided in the form of an endorsement to the Contractor's insurance, the endorsement shall be at least as broad as ISO Form CG 20 10 11 85 or **both** CG 20 10, CG 20 26, CG 20 33, or CG 20 38; **and** CG 20 37 forms if later revisions used).
- 3. 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

This insurance policy is to contain, or be endorsed to contain, additional insured status for the CBJ, its officers, officials, employees, and volunteers 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.

Add the following paragraphs:

- C. Builder's Risk: Is not required for this project.
- C. All Subcontractors are required to secure and maintain the insurance coverages listed above, unless otherwise noted.
- D. If the CONTRACTOR maintains higher limits than the minimums shown above, the OWNER requires and shall be entitled to coverage for the higher limits maintained by the CONTRACTOR. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the OWNER.
- E. Policies shall also specify insurance provided by CONTRACTOR will be considered primary and not contributory to any other insurance available to the OWNER.

- F. Should any of the policies described above be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.
- G. 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:

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 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 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:

SECTION 00800 - SUPPLEMENTARY GENERAL CONDITIONS

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.

Add the following SGC 17:

SGC 17 GENERAL INFORMATION. This work is expected to take place during the start of the cruise season, due to material lead times. Work during off hours may be required for the contractor to meet the schedule.

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:	Cruise Ship Security Checkpo Contract No. DH19-050	int – Ph I	
Timeframe of	of Contract		
	e whether or not clearance is granted are CONTRACTOR or Subcontractor		TRACTOR or Subcontractor:
Name		Address	
clearance an	0.265 of the Alaska Employment Se d release to make final payment for your response to:		
-	ska 99801		
	arance is granted. arance is NOT granted.		
Remarks:			
Signature			Date
Title			

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 <u>all</u> 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

END OF SECTION

CRUISE SHIP SECURITY CHECKPOINT – PH I Contract No. DH19-050 ALASKA LABOR STANDARDS, REPORTING AND PREVAILING WAGE RATE DETERMINATION Page 00830-1

SECTION 010100 - SUMMARY OF WORK

PART 1 - GENERAL

1.1 GENERAL

A. The WORK to be performed under this contract shall consist of furnishing all plant, tools, equipment, materials, supplies, and 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. 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 covered in the Contract Documents involves: Construction of a two, single-story steelframed buildings, 14 feet by 48'- 8" in footprint, on the North and South Cruise Ship Berth approach docks.
- B. The site of the WORK is Juneau, Alaska.

1.3 CONTRACT METHOD

A. The WORK, hereunder will be constructed under a LUMP SUM contract.

1.4 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.

1.5 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, on-site fabrication facilities, and field offices.
- B. Limit use of the site and/or premises to construction activities in areas indicated on the contract Drawings; allow for OWNER occupancy and use by the public.
- C. Confine operations to areas within the Project limits indicated. Portions of the site beyond areas in which construction operations are indicated are not to be disturbed.

SECTION 010100 - SUMMARY OF WORK

- D. Keep driveways and entrances serving the premises clear and available to the OWNER and the OWNER's employees at all times. Do not use these areas for parking or storage of materials and equipment on the site.
- E. Maintain existing buildings in a weather tight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the structure and its occupants during the construction period.

1.6 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.
- B. The CONTRACTOR's use of the Project site shall be limited to those hours that a ship is not scheduled to be docked or actively docked at the Alaska Steamship Dock during the contract period. The 2019 Cruise Ship Schedule, dated January 4, 2019, lists 7 dates that will prohibit use of the site by the CONTRACTOR. These specific dates and times are as follows:

Monday, April 29, 2019 – 2pm to 11pm Thursday, May 9, 2019 – 1pm to 10pm Sunday, May 12, 2019 – 8am to 11pm Monday, May 13, 2019 – 12pm to 11pm Tuesday, May 14, 2019 – 6am to 10pm Wednesday, May 15, 2019 – 6am to 9pm Saturday, May 18, 2019 – 12pm to 10pm

The CONTRACTOR may work outside of the hours listed above to complete the project on time. The CONTRACTOR may be required to obtain a special work hours permit from the CBJ Building Official.

1.7 PARTIAL UTILIZATION OF THE WORK BY OWNER

A. No portion of this Project will be considered for partial utilization.

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 Supervisor, its superintendent, and its Subcontractors as the CONTRACTOR deems appropriate. Other attendants will be:
 - a. ENGINEER of Record.

SECTION 010100 - SUMMARY OF WORK

- b. The OWNER and the ENGINEER.
- c. Governmental representatives as appropriate.
- d. Others as requested by CONTRACTOR, or the OWNER.
- 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.
- 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 distributing the minutes to all persons in attendance.
- 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 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 T 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.

SECTION 010450 - 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.

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. Column base construction
 - 2. Bearing and retaining walls
 - 4. Structural decking

1.3 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.

1.4 APPROVALS

- A. Where prior approval of cutting and patching is required, the CONTRACTOR shall submit the request well in advance of time WORK will be performed. 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 tradesmen to perform the WORK, approximate dates of the WORK, and anticipated results in terms of structural, operational, and visual variations from the original WORK.
- B. The CONTRACTOR shall also request approval to proceed prior to starting WORK of this Section.

PART 2 - PRODUCTS

2.1 MATERIALS USED IN CUTTING AND PATCHING

SECTION 010450 - 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.
- 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.
- 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.

SECTION 010900 - REFERENCE STANDARDS AND DEFINITIONS

PART 1 - GENERAL

1.1 GENERAL

- A. Titles of Sections and Paragraphs: Captions accompanying Specification sections and paragraphs are for convenience of reference only, and do not form a part of the Specifications.
- B. Applicable Publications: Whenever in these Specifications references are made to published Specifications, codes, standards, or other requirements, it shall be understood that wherever no date is specified, only the latest Specifications, standards, or requirements of the respective issuing agencies which have been published as of the date that the WORK is advertised for bids, shall apply; except to the extent that said standards or requirements may be in conflict with applicable laws, ordinances, or governing codes. No requirements set forth herein or shown on the Drawings shall be waived because of any provision of, or omission from, said standards or requirements.
- C. Specialists, Assignments: In certain instances, Specification text requires (or implies) that specific WORK is to be assigned to specialists or expert entities, who must be engaged for the performance of that WORK. Such assignments shall be recognized as special requirements over which the CONTRACTOR has no choice or option. These requirements shall not be interpreted so as to conflict with the enforcement of building codes and similar regulations governing the WORK; also they are not intended to interfere with local union jurisdiction settlements and similar conventions. Such assignments are intended to establish which party or entity involved in a specific unit of WORK is recognized as "expert" for the indicated construction processes or operations. Nevertheless, the final responsibility for fulfillment of the entire set of contract requirements remains with the CONTRACTOR.

1.2 ABBREVIATIONS AND NAMES

A. Where such acronyms or abbreviations are used in the Specifications or other Contract Documents, they mean the recognized name of the trade association, standards-generating organization, authority having jurisdiction, or other entity applicable to the context of the text provision.

1.3 PERMITS, LICENSES, AND CERTIFICATES

A. Upon request by the ENGINEER, the CONTRACTOR shall submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, and similar documents, correspondence, and records established in conjunction with compliance with standards and regulations bearing on performance of the WORK.

1.4 REFERENCE SPECIFICATIONS, CODES, AND STANDARDS

A. Without limiting the generality of other requirements of the Specifications, all WORK specified herein shall conform to or exceed the requirements of applicable codes and the applicable requirements of the following documents.

SECTION 010900 - REFERENCE STANDARDS AND DEFINITIONS

- B. References herein to "Building Code" or "Uniform Building Code" shall mean Uniform Building Code of the International Conference of Building Officials (ICBO).
- C. Similarly, references to "Mechanical Code" or "Uniform Mechanical Code," "Plumbing Code" or "Uniform Plumbing Code," "Fire Code" or "Uniform Fire Code," shall mean Uniform Mechanical Code, Uniform Plumbing Code and Uniform Fire Code of the International Conference of the Building Officials (ICBO). "Electric Code" or "National Electric Code (NEC)" shall mean the National Electric Code of the National Fire Protection Association (NFPA). The latest edition of the codes as approved by the Municipal Code and used by the local agency as of the date that the WORK is advertised for bids, as adopted by the agency having jurisdiction, shall apply to the WORK herein, including all addenda, modifications, amendments, or other lawful changes thereto.
- D. In case of conflict between codes, reference standards, drawings and the other Contract Documents, the most stringent requirements shall govern. All conflicts shall be brought to the attention of the ENGINEER for clarification and directions prior to ordering or providing any materials or furnishing labor. The CONTRACTOR shall bid for the most stringent requirements.
- E. The CONTRACTOR shall construct the WORK specified herein in accordance with the requirements of the Contract Documents and the referenced portions of those referenced codes, standards, and Specifications listed herein.
- F. References herein to "OSHA Regulations for Construction" shall mean Title 29, Part 1926, Construction Safety and Health Regulations, Code of Federal Regulations (OSHA), including all changes and amendments thereto.
- G. References herein to "OSHA Standards" shall mean Title 29, Part 1910, Occupational Safety and Health Standards, Code of Federal Regulations (OSHA), including all changes and amendments thereto.

1.5 DEFINITIONS

A. The basic contract definitions are included in Section 00700 - General Conditions. The following definitions have the meaning defined in the Technical Portions of the WORK:

Approve - Used in conjunction with action on submittals, applications, and requests, is limited to the ARCHITECT's duties and responsibilities as stated in the Conditions of the Contract.

Directed - Terms such as "directed," "requested," "authorized," "selected," "approved," "required," and "permitted" mean "directed by the ENGINEER," "requested by the ENGINEER ", and similar phrases.

Experienced - Means having a minimum of five previous Projects similar in size to this Project, and being familiar with precautions required and with requirements of the authority having jurisdiction.

Furnish - means to supply and deliver to the site, to unload and unpack ready for assembly, installation, testing, and start-up.

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

REFERENCE STANDARDS AND DEFINITIONS Page 010900-2

SECTION 010900 - REFERENCE STANDARDS AND DEFINITIONS

used to assist in locating information but no limitation of location is implied or intended.

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.

Installer - A CONTRACTOR or an entity engaged by the CONTRACTOR, as an employee or Subcontractor for performance of a particular construction activity, including installation, erection, application, and similar operations. Installers are required to be experienced in the operations they are engaged to perform.

Project Site - The space available for construction activities, either exclusively or with others performing other construction on the Project. The extent of the Project Site is shown on the Drawings and may or may not be identical with the description of the land upon which the Project is to be built.

Provide - is defined as furnish and install, ready for the intended use.

Regulation - Includes laws, ordinances, statutes, and lawful orders issued by authorities having jurisdiction, and rules, conventions, and agreements within the construction industry that control performance of the WORK.

Testing Laboratories - An independent entity engaged to perform specific inspections or tests at the Project Site or elsewhere, and to report on and, if required, to interpret results of those inspections or tests.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 1 - GENERAL

1.1 GENERAL

- A. Wherever submittals are required hereunder, all such submittals by the CONTRACTOR shall be submitted to the ENGINEER.
- B. Prior to the Pre-Construction Conference, the CONTRACTOR shall submit the following items to the ENGINEER for review:
 - 1. A submittal schedule for Shop Drawings, Samples, Product Data, and proposed Substitutes or "Or-Equal" items.
 - 2. A Schedule of Values.
 - 3. A complete progress schedule for all phases of the Project.
 - 4. A list of all permits and licenses the CONTRACTOR shall obtain indicating the agency required to grant the permit and the expected date of submittal for the permit and required date for receipt of the permit. CBJ shall apply for the Building Permit.
 - 5. Material Safety Data Sheets on products used on the Project.
 - 6. A traffic maintenance plan, as required.
 - 7. A letter designating the CONTRACTOR's Superintendent, defining that person's responsibility and authority.
 - 8. A letter designating the CONTRACTOR's safety representative and the EEO Officer and that person's responsibility and authority.
 - 9. Individual Mining Plan shall be submitted and approved, by CBJ Engineering, prior to any materials extraction from the CBJ/State pit at Lemon Creek.
- C. No payments shall be made to the CONTRACTOR until the above-listed items are submitted in their entirety, as determined by the ENGINEER.
- D. The CONTRACTOR shall coordinate submittal preparation with performance of construction activities, and with purchasing or fabrication, delivery, other submittals and related activities. Transmit in advance of performance of related activities to avoid delay. Coordinate transmittal of different submittals for related elements so processing will not be delayed by the need to review concurrently for coordination. The ENGINEER reserves the right to withhold action on a submittal requiring coordination until related submittals are received. No extension of time will be authorized because of failure to transmit submittals sufficiently in advance of the WORK to permit processing.
- E. The CONTRACTOR shall distribute copies of the Construction Schedule, Schedule of Values, and the Submittal Schedule to the ENGINEER, Subcontractors, and other parties required to comply with scheduled dates. Post copies in the temporary field office. When revisions are made, distribute to the same parties and post in the same locations. Revise and update each Schedule after each meeting or activity, where revisions have been made. Issue the updated Schedules concurrently with report of each meeting.

1.2 SUBMITTAL PROCESS

- A. Wherever called for in the Contract Documents, or where required by the ENGINEER, the CONTRACTOR shall furnish to the ENGINEER, for review, 6 copies of each submittal.
- B. All submittals shall be accompanied by the CONTRACTOR's standard submittal transmittal form. Any submittal not accompanied by such a form, or where all applicable items on the form are not completed, will be returned for resubmittal.
- C. Normally, a separate transmittal form shall be used for each specific item or class of material or equipment for which a submittal is required. Submittal of various items using a single transmittal form will be permitted only when the items taken together constitute a manufacturer's "package" or are so functionally related that expediency indicates review of the group or package as a whole. A multiple-page submittal shall be collated into sets, and each set shall be stapled or bound, as appropriate, prior to transmittal to the ENGINEER.
- D. Except as may otherwise be provided herein, the ENGINEER will return prints of each submittal to the CONTRACTOR with its comments noted thereon, within 14 calendar days following their receipt by the ENGINEER. It is considered reasonable that the CONTRACTOR shall make a complete and acceptable submittal to the ENGINEER by the second submission of a submittal item. The OWNER reserves the right to withhold monies due the CONTRACTOR to cover additional costs of the ENGINEER to review beyond the second submittal. The ENGINEER's maximum review period for each submittal including all re-submittals will be 14 days per submission.
- E. If 3 copies of a submittal are returned to the CONTRACTOR marked "NO EXCEPTIONS TAKEN," formal revision and resubmission of said submittal will not be required.
- F. If 3 copies of a submittal are returned to the CONTRACTOR marked "MAKE CORRECTIONS NOTED," formal revision shall be made, and resubmission of said submittal will not be required.
- G. If one copy of the submittal is returned to the CONTRACTOR marked "AMEND-RESUBMIT," the CONTRACTOR shall revise said submittal and resubmit the required number of copies of said revised submittal to the ENGINEER.
- H. If one copy of the submittal is returned to the CONTRACTOR marked "REJECTED-RESUBMIT" the CONTRACTOR shall revise said submittal and resubmit the required number of copies of said revised submittal to the ENGINEER.
- I. Fabrication of an item may be commenced only after the ENGINEER has reviewed the pertinent submittal and returned copies to the CONTRACTOR marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED." Corrections indicated on submittal shall be considered as changes necessary to meet the requirements of the Contract Documents and shall not be taken as the basis for changes to the Contract requirements. Only a change order can alter the contract price, time, or requirements.
- J. All CONTRACTOR submittals shall be carefully reviewed by an authorized representative of the CONTRACTOR, prior to submission to the ENGINEER. Each submittal shall be dated, signed, and certified by the CONTRACTOR, as being correct and in strict conformance with the Contract Documents. No consideration for review by the ENGINEER of any CONTRACTOR submittal will be made for any items which have not been so certified by the CONTRACTOR. All non-certified submittals will be returned to the CONTRACTOR without action taken by the ENGINEER, and any delays caused thereby shall be the total responsibility of the CONTRACTOR.

K. The ENGINEER's review of CONTRACTOR submittals shall not relieve the CONTRACTOR of the entire responsibility for the correctness of details and dimensions. The CONTRACTOR shall assume all responsibility and risk for any misfits due to any errors in CONTRACTOR submittals. The CONTRACTOR shall be responsible for the dimensions and the design of adequate connections and details.

1.3 SUBMITTAL SCHEDULE

- A. The CONTRACTOR shall coordinate the Submittal Schedule with the list of subcontracts, Schedule of Values and list of products as well as the Construction Schedule. Prepare the Submittal Schedule in chronological order. Identify all submittals required for the completion of the Work. Provide the following information in the Submittal Schedule:
 - 1. Scheduled date for the first submittal.
 - 2. Related Section number.
 - 3. Name of Subcontractor.
 - 4. Description of the construction element covered.
 - 5. Anticipated date of the ENGINEER's final release or approval.

1.4 SHOP DRAWING SUBMITTALS

- A. The CONTRACTOR shall submit shop Drawings as required with new information, drawn to accurate scale. Indicate deviations from Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings.
- B. The Shop Drawings shall include the following information:
 - 1. Dimensions.
 - 2. Identification of products and materials included.
 - 3. Notation of coordination requirements.
 - 4. Notation of dimensions established by field measurement.
 - 5. Sheet Size: Except for templates, patterns and similar full- size Drawings, submit shop Drawings on sheets at least 8-1/2" x 11" but no larger than 36" x 48".
- C. The term "Shop Drawings" as used herein shall be understood to include detail design calculations, shop Drawings, fabrication, and installation Drawings, section Drawings, lists, graphs, operating instructions, catalog sheets, data sheets, and similar items.
- D. Do not use shop Drawings without a final stamp indicating action taken in connection with construction.

1.5 SAMPLE SUBMITTALS

A. Whenever in the Specifications samples are required, the CONTRACTOR shall submit not less than 3 samples of each such item or material to the ENGINEER for acceptance at no additional cost to the OWNER.

- B. Samples, as required herein, shall be submitted for acceptance a minimum of 14 days prior to ordering such material for delivery to the job site, and shall be submitted in an orderly sequence so that dependent materials or equipment can be assembled and reviewed without causing delays in the WORK.
- C. The CONTRACTOR shall submit full-size samples, cured and finished as specified, and identical to the product proposed. Mount, display, or package samples to facilitate review. Include the following:
 - 1. Generic description.
 - 2. Source.
 - 3. Product name or name of manufacturer.
 - 4. Compliance with recognized standards.
 - 5. Availability and delivery time.
 - 6. Submit samples for review of kind, color, pattern, and texture, for a final check of these characteristics, and a comparison of these characteristics between the final submittal and the component as delivered and installed. Where variations are inherent in the product, submit multiple units that show limits of the variations.
 - 7. Preliminary Submittals. Where samples are for selection of characteristics from a range of choices, submit a full set of choices for the product. Preliminary submittals will be reviewed and returned indicating selection and other action.
 - 8. Submittals. Except for samples illustrating assembly details, quality of WORK, fabrication techniques, connections, operation and similar characteristics, submit 3 sets; one will be returned marked with the action taken. Maintain a sample set at the Project site, for quality comparisons. Sample sets may be used to obtain final acceptance of the construction associated with each set.
 - 9. Prepare additional sets for Subcontractors, manufacturers, fabricators, installers, and others as required for performance. Show distribution on transmittal forms.
- D. All samples shall be individually and indelibly labeled or tagged, indicating thereon all specified physical characteristics and Supplier's names for identification and submitted to the ENGINEER for acceptance. Upon receiving acceptance of the ENGINEER, one set of the samples will be stamped and dated by the ENGINEER and returned to the CONTRACTOR, and one set of samples will be retained by the ENGINEER, and one set of samples shall remain at the job site until completion of the WORK.
- E. Unless clearly stated otherwise, it is assumed that all colors and textures of specified items presented in sample submittal are from the manufacturer's standard colors and standard materials, products, or equipment lines. If the samples represent non-standard colors, materials, products or equipment lines, and their selection will require an increase in Contract Time or Price, the CONTRACTOR will clearly indicate this on the transmittal page of the submittal.

1.6 PRODUCT DATA SUBMITTALS

A. The CONTRACTOR shall collect all the Product Data into a single submittal for each element or system. Mark each copy to show applicable choices and options. Where Product Data includes information on several products, some of which are not required, mark copies to indicate the applicable information. Include the following information:

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050

- 1. Manufacturer's printed recommendations.
- 2. Compliance with recognized trade association standards.
- 3. Compliance with recognized testing agency standards.
- 4. Application of testing agency labels and seals.
- 5. Notation of dimensions verified by field measurement.
- 6. Notation of coordination requirements.
- 7. Preliminary Submittal: Submit a preliminary single-copy where selection of options is required.
- 8. Furnish copies of final submittal to installers, and others required for performance of construction activities. Show distribution on transmittal forms. Do not proceed with installation until an approved copy of Product Data is in the installer's possession. Do not permit use of unmarked copies of Product Data in connection with construction.

1.7 PROPOSED SUBSTITUTE OR "OR EQUAL" ITEM SUBMITTALS

- A. Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function, and quality required. If the name is followed by the words "or-equal" indicating that a substitution is permitted, materials or equipment of other Suppliers may be accepted by the ENGINEER if sufficient information is submitted by the CONTRACTOR to allow the ENGINEER to determine that the material or equipment proposed is equivalent or equal to that named, subject to the following requirements:
 - 1. The burden of proof as to the type, function, and quality of any such substitute material or equipment shall be upon the CONTRACTOR.
 - 2. The ENGINEER will be the sole judge as to the type, function, and quality of any such substitute material or equipment and the ENGINEER's decision shall be final.
 - 3. The ENGINEER may require the CONTRACTOR, to furnish at the CONTRACTOR's expense, additional data about the proposed substitute.
 - 4. The OWNER may require the CONTRACTOR to furnish at the CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.
 - 5. Acceptance by the ENGINEER of a substitute item proposed by the CONTRACTOR shall not relieve the CONTRACTOR of the responsibility for full compliance with the Contract Documents and for adequacy of the substitute item.
 - 6. The CONTRACTOR shall be responsible for resultant changes and all additional costs which the accepted substitution requires in the CONTRACTOR's WORK, the WORK of its Subcontractors and of other contractors, and shall effect such changes without cost to the OWNER. This shall include the cost for redesign and claims of other contractor(s) affected by the resulting change.
- B. The procedure for review by the ENGINEER will include the following:
 - 1. If the CONTRACTOR wishes to furnish or use a substitute item of material or equipment, the CONTRACTOR shall make written application to the ENGINEER on the "Substitution Request Form" for acceptance thereof.
 - 2. Unless otherwise provided by law or authorized in writing by the ENGINEER, the "Substitution Request Form(s)" shall be submitted within the 14-day period after Notice of Award/Notice To Proceed.

- 3. Wherever a proposed substitute material or equipment has not been submitted within said 14-day period, or wherever the submission of a proposed substitute material or equipment has been judged to be unacceptable by the ENGINEER, the CONTRACTOR shall provide material or equipment named in the Contract Documents.
- 4. The CONTRACTOR shall certify that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified, and be suited to the same use as that specified.
- 5. The ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. In no case will this reasonable time period be less than14 days.
- 6. As applicable, no shop Drawing submittals will be made for a substitute item nor will any substitute item be ordered, installed, or utilized without the ENGINEER's prior written acceptance of the CONTRACTOR's "Substitution Request Form" which will be evidenced by a Change Order.
- C. The CONTRACTOR's application using the "Substitution Request Forms" shall contain the following statements and/or information which shall be considered by the ENGINEER in evaluating the proposed substitution when one or more of the following conditions are satisfied, as determined by the ENGINEER; otherwise, requests will be returned without action except to record non-compliance with these requirements.
 - 1. Extensive revisions to the Contract Documents are not required.
 - 2. Proposed changes are in keeping with the general intent of the Contract Documents.
 - 3. The request is timely, fully documented, and properly submitted.
 - 4. The request is directly related to an "or equal" clause or similar language in the Contract Documents.
 - 5. The specified product or method of construction cannot be provided within the contract time. The request will not be considered if the product or method cannot be provided as a result of the CONTRACTOR's failure to pursue the WORK promptly, or to coordinate activities properly.
 - 6. The specified product or method of construction cannot receive necessary approval by a governing authority, and the requested substitution can be approved.
 - 7. A substantial advantage is offered to the OWNER, in terms of cost, time, energy conservation, or other considerations of merit, after deducting off-setting responsibilities the OWNER may be required to bear. Additional responsibilities for the OWNER may include additional compensation to the ENGINEER of Record for redesign and evaluation services, increased cost of other construction by the OWNER, or separate contractors, and similar considerations.
 - 8. The specified product or method of construction cannot be provided in a manner that is compatible with other materials, and where the CONTRACTOR certifies that the substitution will overcome the incompatibility.
 - 9. The specified product or method of construction cannot be coordinated with other materials, and where the CONTRACTOR certifies that the proposed substitution can be coordinated.
 - 10. The specified product or method of construction cannot provide a warranty required by the contract documents and where the CONTRACTOR certifies that the proposed substitution provide the required warranty.
 - 11. The evaluation and acceptance of the proposed substitute will not prejudice the CONTRACTOR's achievement of substantial completion on time.
 - 12. Available maintenance, repair, and replacement service and its estimated cost will be indicated.
 - 13. Whether or not incorporation or use of the substitute in connection with the WORK is subject to payment of any license fee or royalty.

- 14. Itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including cost of redesign and claims of other contractors affected by the resulting change.
- D. The CONTRACTOR's submittal and ENGINEER's acceptance of Shop Drawings, Product Data or Samples that relate to construction activities not complying with the contract documents does not constitute an acceptable or valid request for substitution, nor does it constitute approval.

1.8 SCHEDULE OF VALUES

- A. For Lump Sum Pay Unit contracts, the CONTRACTOR shall submit a Schedule of Values to the ENGINEER. The Schedule of Values shall list the cost breakdown of the Lump Sum Pay Unit contract and shall be coordinated with the construction schedule.
 - 1. Correlate line items in the Schedule of Values with other schedules and forms.
 - 2. Use the Contract Document's Table of Contents as a guide to establish the format for the Schedule of Values.
 - 3. Include Record Drawings as a line item.

1.9 PROGRESS SCHEDULE

- A. The progress schedule shall be in Bar Chart or Critical Path Method (CPM) form, as required by the ENGINEER.
- B. The progress schedule shall show the order in which the CONTRACTOR proposes to carry out the WORK and the contemplated date on which the CONTRACTOR and its Subcontractors will start and finish each of the salient features of the WORK, including any scheduled periods of shutdown. The schedule shall also indicate any anticipated periods of multiple-shift work.
- C. Upon substantial changes to the CONTRACTOR's progress schedule of WORK or upon request of the ENGINEER, the CONTRACTOR shall submit a revised progress schedule(s) in the form required. Such revised schedule(s) shall conform with the Contract Time and take into account delays which may have been encountered in the performance of the WORK. In submitting a revised schedule, the CONTRACTOR shall state specifically the reason for the revision and the adjustments made in the schedule or methods of operation to ensure the completion of all the WORK within the Contract Time.

1.10 RECORD DRAWING SUBMITTAL

A. The CONTRACTOR shall keep and maintain, at the job site, one record set of Drawings. On these, it shall mark all Project conditions, locations, configurations, and any other changes or deviations which may vary from the details represented on the original Contract Drawings, including buried or concealed construction and utility features which are revealed during the course of construction. Special attention shall be given to recording the horizontal and vertical location of all buried utilities that differ from the locations indicated, or which were not indicated on the Contract Drawings. Said record Drawings shall be supplemented by any detailed sketches as necessary or directed to indicate, fully, the WORK as actually constructed. These master record Drawings of the CONTRACTOR's

representation of as-built conditions, including all revisions made necessary by Addenda, Change Orders, and the like shall be maintained up-to-date during the progress of the WORK.

- B. Copies of the record Drawings shall be submitted to the ENGINEER prior to the Notice of Substantial Completion by the ENGINEER.
- C. Final payment will not be acted upon until the CONTRACTOR prepared record Drawings have been delivered to the ENGINEER.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

(Substitution Request Form – Next Page)

CBJ Engineering Department SUBSTITUTION REQUEST FORM

TO:		Projec	:t:
Contract No			
SPECIFIED ITEM:			
Section	Page	Paragraph	Description

The undersigned requests consideration of the following: **PROPOSED SUBSTITUTION**:

Attached data includes product description, Specifications, Drawings, photographs, performance and test data adequate for evaluation of the request. Applicable portions of the data are clearly identified.

The undersigned states that the following paragraphs, unless modified on attachments, are correct:

- 1. The proposed substitution does not affect dimensions shown on Drawings and will not require a change in any of the Contract Documents.
- 2. The undersigned will pay for changes to the design, including engineering design, detailing, and construction costs caused by the requested substitution which is estimated to be \$_____.
- 3. The proposed substitution will have no adverse affect on other contractors, the construction schedule (specifically the date of substantial completion), or specified warranty requirements.
- 4. Maintenance and service parts will be locally available for the proposed substitution.
- 5. The incorporation or use of the substitute in connection with the WORK is not subject to payment of any license fee or royalty.

The undersigned further states that the function, appearance, and quality of the Proposed Substitution are equivalent or superior to the specified item.

Submitted by CONTRACTOR (date):	ENGINEER Review (date):	
Signature:	By:	
Print Name:	Decision by CBJ:	
Firm:	AcceptedAccepted as Noted	
Title:	Not AcceptedReceived Too Late	
Telephone:		
Attachments:	Signature:	

The use of this substitution is not authorized until accepted by the ENGINEER.

SECTION 013010 - SCHEDULE OF VALUES

PART 1 - GENERAL

1.1 THE REQUIREMENT

A. This Section defines the process whereby the Schedule of Values (Lump Sum Pay Unit price breakdown) shall be developed and ultimately incorporated into the cost loading function of the CPM Schedule as specified in Section 013110 - CPM Construction Schedules. Monthly progress payment amounts shall be determined from the monthly progress updates of the CPM Schedule activities.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 010100 Summary of WORK.
- B. Section 013110 CMP Construction Schedules.

1.3 PRELIMINARY SCHEDULE OF VALUES

- A. The Schedule of Values shall be developed in two (2) steps independent but parallel with the development of the CPM Schedule activities and logic. The steps shall be as follows:
 - 1. The CONTRACTOR shall submit a preliminary Schedule of Values for the major components of the WORK at the Preconstruction Conference as specified and referenced in Section 01010 Summary of WORK. The listing shall include, at a minimum, the proposed value for the major WORK components:
 - 2. The CONTRACTOR and ENGINEER shall meet and jointly review the preliminary Schedule of Values and make any adjustments in value allocations necessary, if in the opinion of the ENGINEER, 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 ENGINEER may require inclusion of other major WORK components not included in the above listing if, in the opinion of the ENGINEER, such additional components are appropriate. This review and any necessary revisions shall be completed within 15 Days from the date of Notice to Proceed.

1.4 DETAILED SCHEDULE OF VALUES

A. The CONTRACTOR shall prepare and submit a detailed Schedule of Values to the ENGINEER within 30 Days from the date of the Notice to Proceed. The detailed Schedule of Values shall be based on the accepted preliminary Schedule of Values for major WORK components. Because the ultimate requirement is to develop a detailed Schedule of Values sufficient to determine appropriate monthly progress payment amounts through cost loading of the CPM Schedule activities, sufficient detailed breakdown shall be provided to meet this requirement. The ENGINEER shall be the sole judge of acceptable numbers, details and description of values established. If, in the opinion of the ENGINEER, a greater number of Schedule of Values items than proposed by the CONTRACTOR is necessary, the CONTRACTOR shall add the additional items so identified by the ENGINEER.

SECTION 013010 - SCHEDULE OF VALUES

1. The minimum detail of breakdown of the major WORK components is indicated below. Greater detail shall be provided as directed by the ENGINEER.

The CONTRACTOR and ENGINEER shall meet and jointly review the detailed Schedule of Values within 35 Days from the Notice to Proceed. The value allocations and extent of detail shall be reviewed to determine any necessary adjustments to the values and to determine if sufficient detail has been proposed to provide cost loading of the CPM Schedule activities. Any adjustments deemed necessary to the value allocation or level of detail shall be made by the CONTRACTOR and a revised detailed Schedule of Values shall be submitted within 40 Days from the date of Notice to Proceed.

2. Following acceptance of the detailed Schedule of Values, the CONTRACTOR shall incorporate the values into the cost loading portion of the CPM Schedule. The CPM activities and logic shall have been developed concurrent to the development of the detailed Schedule of Values; however, it shall be necessary to adjust the detailed Schedule of Values to correlate to individual schedule activities. It is anticipated that instances will occur, due to the independent but parallel development of the Schedule of Values and the CPM Schedule activities, where interfacing these two documents will require changes to each document, Schedule activities may need to be added to accommodate the detail of the Schedule of Values. Schedule of Values items may need to be added to accommodate the detail of the CPM Schedule activities. Where such instances arise, the CONTRACTOR shall propose changes to the Schedule of Values and to the CPM Schedule activities to satisfy the CPM Schedule cost loading requirements.

1.5 CROSS REFERENCE LISTING

- A. To assist in the correlation of the Schedule of Values and the CPM Schedule, the CONTRACTOR shall provide a Cross Reference Listing which shall be furnished in two parts. The first part shall list each scheduled activity with the breakdown of the respective valued items making up the total cost of the activity. The second part shall list the valued items with the respective scheduled activity or activities that make up the total cost for a valued item (shown in the Schedule of Values). The total cost for each scheduled item should be indicated.
- B. These listings shall be updated and submitted in conjunction with the CPM monthly submittals as stated in Section 01311 CMP Construction Schedule.
- C. Approved change orders reflected in the CPM Schedule shall be incorporated into the Schedule of Values as a single unit identified by the Change Order number.

1.6 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 ENGINEER. Other activity values shall be reduced to provide equal value adjustment increases for added activities as approved by the ENGINEER.

SECTION 013010 - SCHEDULE OF VALUES

B. In the event that the CONTRACTOR and ENGINEER 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.

1.7 LIQUIDATED DAMAGES

A. If any submittal that is required by this Section is determined by the ENGINEER to be incomplete or is submitted later than set out herein, the OWNER will suffer financial loss and the CONTRACTOR will be assessed liquidated damages as required by Article 4 of the Section 005000 - Agreement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 013100 - PROGRESS SCHEDULES

PART 1 - GENERAL

1.1 REQUIREMENTS INCLUDED.

A. Procedures for preparation and submittal of construction progress schedules and periodic schedule updating.

1.2 RELATED REQUIREMENTS

- A. Section 010100 Summary of WORK.
- B. Section 013000 CONTRACTOR Submittals.
- C. Section 013010 Schedule of Values.

1.3 FORMAT

- A. Prepare schedules as a horizontal bar chart with separate bar for each major portion of WORK or operations, identifying first work day of each week.
- B. Sequence of listings shall reflect the chronological order of the start of each item of WORK and encompass those items as noted in the table of contents of this Project manual.
- C. Scale and spacing shall be such as to provide for notations and revisions.
- D. Minimum sheet size of 22 x 34 inches, unless approved otherwise by the ENGINEER.

1.4 CONTENT

- A. Show complete sequence of construction by activity, with dates for beginning and completion of each element of construction.
- B. Identify each item by Specification section number.
- C. Identify WORK of separate stages and other logically grouped activities.
- D. Provide sub-schedules to define critical portions of entire schedule.
- E. Show accumulated percentage of completion of each item, and total percentage of WORK completed, as of the mid and final days of each month.
- F. Provide separate schedules of submittal dates for Shop Drawings, product data, and samples, including products specified under alternate bids, and dates reviewed submittals will be required from the Project ENGINEER. Show decision dates for selection of finishes and options, where appropriate.
- G. Show delivery dates for materials and products.

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050

PROGRESS SCHEDULES Page 013100-1

SECTION 013100 - PROGRESS SCHEDULES

H. Coordinate and display cost allocation requirements of Section 01301 - Schedule of Values, prior to the CONTRACTOR's initial application for payment.

1.5 REVISIONS TO SCHEDULES

- A. Indicate progress of each activity to date of submittal, and projected completion date of each activity.
- B. Identify activities modified since previous submittal, major changes in scope, and other identifiable changes.
- C. Provide narrative report to define problem areas, anticipated delays, and impact on schedule. Report corrective action taken, or proposed, and its effect including the effect of changes on schedules of separate Subcontractors.
- D. When submitting a revised schedule, CONTRACTOR shall state specifically the reason for the revision and the adjustments made in the schedule or methods of operation to ensure the completion of all the WORK within the Contract time.

1.6 SUBMITTALS

- A. Prior to the Pre-Construction Meeting submit two sets of initial schedules in accordance with Section 013000 CONTRACTOR Submittals. After review, resubmit required revised data within ten days, modified to accommodate revisions recommended by the Project ENGINEER.
- B. Submit progress schedules reflecting the progress to date and anticipated in the future with each Application for Payment. Upon substantial changes to the CONTRACTOR's progress schedule of WORK, or upon request of the Project ENGINEER, the CONTRACTOR shall submit the revised progress schedule(s) in the form required.
- C. Submit under transmittal letter specified in Section 013000 CONTRACTOR Submittals.

1.7 DISTRIBUTION

- A. Distribute copies of reviewed schedules to job site file, Subcontractors, suppliers, and other concerned entities.
- B. Instruct recipients to promptly report, in writing, problems anticipated by projections shown in schedules.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 013110 - CPM CONSTRUCTION SCHEDULE

PART 1 - GENERAL

1.1 GENERAL

A. The scheduling of the WORK under the contract shall be performed by the CONTRACTOR in accordance with the requirements of this Section. The development of the schedule, the cost loading of the schedule, monthly payment request requisitions and Project status reporting requirements of the contract shall employ computerized Critical Path Method (CPM) scheduling. The CPM Schedule shall be cost loaded based on the schedule of values as approved by the ENGINEER in accordance with the requirements of Section 01301 - Schedule of Values. The CPM Schedule and all reports should be prepared with Primavera, MS Project 2003, or other software approved by the ENGINEER with substantially similar functions.

1.2 QUALIFICATIONS

A. Within 14 calendar days after the date of the Notice of Intent to Award letter, the CONTRACTOR shall provide a statement which verifies that the CONTRACTOR has in-house capability qualified to use CPM technique and the approved software, or that the CONTRACTOR will employ a CPM consultant so qualified. In either event the statement shall identify the individual who will perform the CPM scheduling. Capability shall be verified by description of construction Projects on which the individual has successfully applied computerized CPM and shall include at least two projects of similar nature, scope and valued at not less than one-half the expected cost of this Project.

1.3 INITIAL SCHEDULE SUBMITTALS

- A. The CONTRACTOR shall submit a project overview bar chart schedule at the Pre-Construction Conference as specified below:
 - 1. Project Overview Bar Chart: The overview bar chart shall indicate the major components of the Project WORK and the sequence relations between major components and subdivisions of major components. The overview bar chart shall indicate the relationships and time frames in which the various components of the WORK will be made substantially complete and placed into service in order to meet the Project milestones. Planned durations and start dates shall be indicated for each WORK item.

1.4 CPM SCHEDULE SUBMITTALS

A. Original CPM Schedule Submittal: Within 15 days after the Notice to Proceed letter, the CONTRACTOR shall submit for review by the ENGINEER a hard copy of the CPM Network Schedule. The CONTRACTOR's attention is directed to the requirement that the schedule shall contain sufficient detail and information to cost load the CPM schedule in accordance with the approved schedule of values as specified under Section 013010 - Schedule of Values. Each installation and side WORK activity shall have been cost loaded as specified.

- B. Acceptance: The acceptance of the CONTRACTOR's schedule by the ENGINEER and OWNER will be based solely upon the schedules compliance with the contract requirements. By way of the CONTRACTOR assigning activity durations and proposing the sequence of the WORK, the CONTRACTOR agrees to utilize sufficient and necessary management and other resources to perform the WORK in accordance with the schedule. Upon submittal of a schedule update, the updated schedule shall be considered the "current" Project schedule.
- C. Submission of a CONTRACTOR's Progress Schedule to the OWNER or ENGINEER shall not relieve the CONTRACTOR of it's total responsibility for scheduling sequencing and pursuing the WORK to comply with the requirements of the Contract Documents, including adverse effects such as delays resulting from ill-timed WORK.
- D. Monthly Updates and Periodic CPM Schedule Submittals: Following the acceptance of the CONTRACTOR's Initial Construction Schedule, the CONTRACTOR shall monitor the progress of the WORK and adjust the schedule each month to reflect actual progress and any changes in planned future activities. Each schedule update submitted must be complete including all information requested in the original CPM schedule. Each update should continue to show all WORK activities including those already completed. These computer activities should accurately reflect the "As Built" information by indicating when the WORK was actually started and completed.
- E. Neither the submission nor the updating of the CONTRACTOR's original schedule submittal nor the submission, updating, change or revision of any other report, curve, schedule or narrative submitted to the OWNER by the CONTRACTOR under this contract, nor the OWNER's review or acceptance of any such report, curve, schedule or narrative shall have the effect of amending, or modifying, in any way, the contract completion date or milestone dates or of modifying or limiting in any way the CONTRACTOR's obligations under this contract. Only a signed, fully executed Change Order can modify these contractual obligations.

1.5 CHANGE ORDERS

A. Upon approval of a Change Order, or upon receipt by the CONTRACTOR of authorization to proceed with additional WORK, the change shall be reflected in the next submittal of the CPM schedule by the CONTRACTOR. The CONTRACTOR shall utilize a sub-network in the schedule depicting the changed WORK and its effect on other activities. This sub-network shall be tied to the main network with the appropriate logic so that a true analysis of the Critical Path can be made.

1.6 CPM SCHEDULE FLOAT

- A. Float Time: Float time shall be as follows:
 - 1. Definition: Unless otherwise provided herein, float as referenced in these documents is total float. Total float is the period of time measured by the number of working days each noncritical path activity may be delayed before it and its succeeding activities become part of the critical path. If a noncritical path activity is delayed beyond its float period, that activity then becomes part of the critical path and controls the end date of the Project. Thus, the delay of a noncritical path activity beyond its float period will cause delay to the Project itself.

2. Float Ownership. Neither the OWNER nor the CONTRACTOR own the float time. The Project owns the float time. As such, liability for delay for the Project completion date rests with the party actually causing delay to the Project completion date. For example, if Party A uses some, but not all of the float time and Party B later uses the remainder of the float time as well as additional time beyond the float time, then Party B shall be liable for the costs associated with the time that represents a delay to the Project's completion data. Party A would not be responsible for any costs since it did not consume all of the float time and additional float time remained, therefore, the Project's completion date was unaffected.

1.7 SCHEDULE REPORTS (FORMAT)

- A. Schedule Reports: Schedule Reports shall be prepared based on the Construction Schedule, and shall include the following minimum data for each activity:
 - 1. Activity Numbers, and Responsibility Codes.
 - 2. Estimated Activity Duration.
 - 3. Activity Description.
 - 4. Activity's Percent Complete.
 - 5. Early Start Date (Calendar Dated).
 - 6. Early Finish Date (Calendar Dated).
 - 7. Late Start Date (Calendar Dated).
 - 8. Late Finish Date (Calendar Dated).
 - 9. Status (Whether Critical).
 - 10. Total Float for Each Activity.
 - 11. Free Float for Each Activity.
 - 12. Cost Value for Each Activity.
- B. Project Information: Each Schedule Report shall be prefaced with the following summary data.
 - 1. Project Name.
 - 2. CONTRACTOR.
 - 3. Type of Tabulation.
 - 4. Project Duration.
 - 5. Contract Completion Date (revised to reflect time extensions).
 - 6. The Commencement Date Stated in the Noticed to Proceed.
 - 7. The Data Date and Plot Date of the Network Diagram.
 - 8. If an update, cite the new schedule completion date.

1.8 PROJECT STATUS REPORTING

- A. In addition to the submittal requirements for the CPM scheduling identified in this Section, the CONTRACTOR shall provide monthly Project status reports (Overview Bar Chart and a written narrative report) to be submitted in conjunction with the revised CPM Schedules as specified in paragraph 1.5(D). Status reporting shall be in the form specified below.
- B. The CONTRACTOR shall prepare and submit monthly an Overview Bar Chart schedule of the major Project components. The overview bar chart schedule shall be a summary of the current CPM schedule (original and as updated and adjusted throughout the entire construction period). It shall

be limited to not more that four sheets which shall not exceed 36-inch by 60-inch. The major Project components shall be represented as time bars which shall be subdivided into various types of WORK including but not limited to demolition, excavation and earthwork, yard piping, concrete construction, mechanical, electrical and instrumentation installations. Major components shall include each new structure by area designation, sitework, modifications to existing structures, tie-ins to existing facilities and plant start-ups.

- C. Each major component and subdivision shall be accurately time scale plotted consistent with the Project overview bar chart specified in Article 1.4 above. It shall represent the same status indicated by early start and finish activity information contained in the latest update of the CPM schedule. In addition, a percent complete shall be indicated for each major component and subdivision. The initial submittal of the overview bar chart schedule shall be made at the time that the revised original CPM schedule is submitted to the ENGINEER (65 days from the commencement date stated in the Notice to Proceed). The CONTRACTOR shall amend the overview schedule to include any additional detail required by the ENGINEER. The CONTRACTOR shall include any additional information requested by the ENGINEER at any time during the construction of the WORK.
- D. The CONTRACTOR shall provide written narrative reports of the status of the Project for submission to the ENGINEER as noted in paragraph 1.9.(A) of this Section. Written status reports shall include:
 - 1. The status of major Project components (percent complete, amount of time, ahead or behind schedule) and an explanation of how the Project will be brought back on schedule if delays have occurred.
 - 2. The progress made on critical activities indicated on the CPM schedule.
 - 3. Explanations for any lack of WORK on critical path activities planned to be progressed during the last month.
 - 4. Explanations for any schedule changes, including changes to the logic or to activity durations.
 - 5. A list of the critical activities scheduled to be performed in the next two month period.
 - 6. The status of major material and equipment procurement.
 - 7. The value of materials and equipment properly stored at the site but not yet incorporated into the WORK-in-place.
 - 8. Any delays encountered during the reporting period.
 - 9. An assessment of inclement weather delays and impacts to the progress of the WORK.
- E. The CONTRACTOR may include any other information pertinent to the status of the Project. The CONTRACTOR shall include additional status information required by the ENGINEER.

1.9 INCLEMENT WEATHER PROVISIONS OF THE SCHEDULE

A. CONTRACTOR's construction schedule shall include at least 100 lost normal WORK days on the CPM schedule's critical path due to inclement weather. Lost normal WORK days shall be determined as specified in Section 008000 - Supplemental General Conditions.

1.10 LIQUIDATED DAMAGES

A. If any submittal required by this Section is determined by the ENGINEER to be incomplete or is submitted later than required, the OWNER will suffer financial loss and accordingly liquidated

damages will be assessed against the CONTRACTOR in accordance with Article 4 in Section 005000 - Agreement.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 1 - GENERAL

1.1 GENERAL

- A. The CONTRACTOR shall protect all existing utilities and improvements not designated for removal and shall restore damaged or temporarily relocated utilities and improvements to a condition equal to or better than they were prior to such damage or temporary relocation, all in accordance with requirements of the Contract Documents.
- B. The CONTRACTOR shall verify the exact locations and depths of all utilities shown and the CONTRACTOR shall make exploratory excavations of all utilities that may interfere with the WORK. All such exploratory excavations shall be performed as soon as practicable after award of the contract and, in any event, a sufficient time in advance of construction to avoid possible delays to the CONTRACTOR's WORK. When such exploratory excavations show the utility location as shown to be in error, the CONTRACTOR shall so notify the ENGINEER.
- C. The number of exploratory excavations required shall be that number which is sufficient to determine the alignment and grade of the utility.

1.2 RIGHTS-OF-WAY

- A. The CONTRACTOR shall not do any WORK that would affect any oil, gas, sewer, or water pipeline; any telephone, telegraph, or electric transmission line; any fence; or any other structure, nor shall the CONTRACTOR enter upon the rights-of-way involved until notified by the ENGINEER that the OWNER has secured authority therefor from the proper party. After authority has been obtained, the CONTRACTOR shall give said party due notice of its intention to begin WORK, if required by said party, and shall remove, shore, support or otherwise protect such pipeline, transmission line, ditch, fence, or structure or replace the same. When two or more contracts are being executed at one time on the same or adjacent land in such manner that work on one contract may interfere with that on another, the OWNER shall determine the sequence and order of the WORK. When the territory of one contract is the necessary or convenient means of access for the execution of another contract, such privilege of access or any other reasonable privilege may be granted by the OWNER to the CONTRACTOR so desiring, to the extent, amount, in the manner, and at the times permitted.
- B. No such decision as to the method or time of conducting the WORK or the use of territory shall be made the basis of any claim for delay or damage, except as provided for temporary suspension of the WORK in Article 15 of the General Conditions of the Contract.

1.3 PROTECTION OF SURVEY MONUMENTS, STREET, AND/OR ROADWAY MARKERS

A. The CONTRACTOR shall not destroy, remove, or otherwise disturb any existing survey markers or other existing street or roadway markers without proper authorization. No pavement breaking or excavation shall be started until all survey or other permanent marker points that will be disturbed by the construction operations have been properly referenced. All survey monuments, markers or points disturbed by the CONTRACTOR shall be accurately re-established, at the CONTRACTOR's expense unless provided for elsewhere in the Contract, after all street or roadway resurfacing has

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050

PROTECTION AND RESTORATION OF EXISTING FACILITIES Page 015300-1

been completed. Re-establishment of all survey monuments shall be by a registered Alaskan Land Surveyor.

1.4 RESTORATION OF PAVEMENT

- A. General: All paved areas including asphaltic concrete berms cut or damaged during construction shall be replaced with similar materials and of equal thickness to match the existing adjacent undisturbed areas, except where specific resurfacing requirements have been called for in the Contract Documents or in the requirements of the agency issuing the permit. All temporary and permanent pavement shall conform to the requirements of the affected pavement owner. All pavements which are subject to partial removal shall be neatly saw cut in straight lines.
- B. Temporary Resurfacing: Wherever required by the public authorities having jurisdiction, the CONTRACTOR shall place temporary surfacing promptly after backfilling and shall maintain such surfacing for the period of time fixed by said authorities before proceeding with the final restoration of improvements.
- C. Permanent Resurfacing: In order to obtain a satisfactory junction with adjacent surfaces, the CONTRACTOR shall saw cut back and trim the edge so as to provide a clean, sound, vertical joint before permanent replacement of an excavated or damaged portion of pavement. Damaged edges of pavement along excavations and elsewhere shall be trimmed back by saw cutting in straight lines. All pavement restoration and other facilities restoration shall be constructed to finish grades compatible with adjacent undisturbed pavement.
- D. Restoration of Sidewalks or Private Driveways: Wherever sidewalks or private roads have been removed for purposes of construction, the CONTRACTOR shall place suitable temporary sidewalks or roadways promptly after backfilling and shall maintain them in satisfactory condition for the period of time fixed by the authorities having jurisdiction over the affected portions before proceeding with the final restoration or, if no such period of times is so fixed, the CONTRACTOR shall maintain said temporary sidewalks or roadways until the final restoration thereof has been made.

1.5 EXISTING UTILITIES AND IMPROVEMENTS

- A. General: The CONTRACTOR shall protect all Underground Utilities and other improvements which may be impaired during construction operations. It shall be the CONTRACTOR's responsibility to ascertain the actual location of all existing utilities and other improvements that will be encountered in its construction operations, and to see that such utilities or other improvements are adequately protected from damage due to such operations. The CONTRACTOR shall take all possible precautions for the protection of unforeseen utility lines to provide for uninterrupted service and to provide such special protection as may be necessary.
- B. Utilities to be Moved: In case it shall be necessary to move the property of any public utility or franchise holder, such utility company or franchise holder will, upon request of the CONTRACTOR, be notified by the OWNER to move such property within a specified reasonable time. When utility lines that are to be removed are encountered within the area of operations, the CONTRACTOR shall notify the ENGINEER a sufficient time in advance for the necessary measures to be taken to prevent interruption of service.

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050

PROTECTION AND RESTORATION OF EXISTING FACILITIES Page 015300-2

- C. Where the proper completion of the WORK requires the temporary or permanent removal and/or relocation of an existing utility or other improvement which is indicated, the CONTRACTOR shall remove and, without unnecessary delay, temporarily replace or relocate such utility or improvement in a manner satisfactory to the ENGINEER and the owner of the facility. In all cases of such temporary removal or relocation, restoration to former location shall be accomplished by the CONTRACTOR in a manner that will restore or replace the utility or improvement as nearly as possible to its former locations and to as good or better condition than found prior to removal.
- D. OWNER's Right of Access: The right is reserved to the OWNER and to the owners of public utilities and franchises to enter at any time upon any public street, alley, right-of-way, or easement for the purpose of making changes in their property made necessary by the WORK of this Contract.
- E. Underground Utilities Indicated: Existing utility lines that are indicated or the locations of which are made known to the CONTRACTOR prior to excavation and that are to be retained, and all utility lines that are constructed during excavation operations shall be protected from damage during excavation and backfilling and, if damaged, shall be immediately repaired or replaced by the CONTRACTOR.
- F. Underground Utilities Not Indicated: In the event that the CONTRACTOR damages any existing utility lines that are not indicated or the locations of which are not made known to the CONTRACTOR prior to excavation, a written report thereof shall be made immediately to the ENGINEER. If directed by the ENGINEER, repairs shall be made by the CONTRACTOR under the provisions for changes and extra WORK contained in Articles 10, 11, and 12 of the General Conditions.
- G. All costs of locating, repairing damage not due to failure of the CONTRACTOR to exercise reasonable care, and removing or relocating such utility facilities not shown in the Contract Documents with reasonable accuracy, and for equipment on the Project which was actually working on that portion of the WORK which was interrupted or idled by removal or relocation of such utility facilities, and which was necessarily idled during such WORK will be paid for as extra WORK in accordance with the provisions of Articles 10, 11, and 12 of the General Conditions.
- H. Approval of Repairs: All repairs to a damaged utility or improvement are subject to inspection and approval by an authorized representative of the utility or improvement owner before being concealed by backfill or other work.
- I. Maintaining in Service: All oil and gasoline pipelines, power, and telephone or the communication cable ducts, gas and water mains, irrigation lines, sewer lines, storm drain lines, poles, and overhead power and communication wires and cables encountered along the line of the WORK shall remain continuously in service during all the operations under the Contract, unless other arrangements satisfactory to the ENGINEER are made with the owner of said pipelines, duct, main, irrigation line, sewer, storm drain, pole, or wire or cable. The CONTRACTOR shall be responsible for and shall repair all damage due to its operations, and the provisions of this Section shall not be abated even in the event such damage occurs after backfilling or is not discovered until after completion of the backfilling.

1.6 TREES WITHIN STREET RIGHTS-OF-WAY AND PROJECT LIMITS

- A. General: The CONTRACTOR shall exercise all necessary precautions so as not to damage or destroy any trees or shrubs, including those lying within street rights-of-way and Project limits, and shall not trim or remove any trees unless such trees have been approved for trimming or removal by the jurisdictional agency or OWNER. All existing trees and shrubs which are damaged during construction shall be trimmed or replaced by the CONTRACTOR or a certified tree company under permit from the jurisdictional agency and/or the OWNER. Tree trimming and replacement shall be accomplished in accordance with the following paragraphs:
 - 1. Trimming: Symmetry of the tree shall be preserved; no stubs or splits or torn branches left; clean cuts shall be made close to the trunk or large branch. Spikes shall not be used for climbing live trees. All cuts over 1-1/2 inches in diameter shall be coated with an asphaltic emulsion material.
 - 2. Replacement: The CONTRACTOR shall immediately notify the jurisdictional agency and/or the OWNER if any tree is damaged by the CONTRACTOR's operations. If, in the opinion of said agency or the OWNER, the damage is such that replacement is necessary, the CONTRACTOR shall replace the tree at its own expense. The tree shall be of a like size and variety as the tree damaged, or, the CONTRACTOR shall pay to the owner of said tree a compensatory payment acceptable to the tree owner, subject to the approval of the jurisdictional agency or OWNER.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 015500 - SITE ACCESS AND STORAGE

PART 1 - GENERAL

1.1 CONTRACTOR'S WORK AND STORAGE AREA

- A. The CONTRACTOR shall be allowed limited areas for on-site storage necessary for the proper execution of the WORK. Such areas will be authorized by the OWNER at the Pre-Construction conference.
- B. The CONTRACTOR shall construct and use a separate storage area for hazardous materials used in constructing the WORK

1.2 CONTRACTOR'S WORK AND STORAGE AREA

- A. The CONTRACTOR shall be allowed limited areas for non-hazardous on-site storage necessary for the proper execution of the WORK. Such areas will be authorized by the OWNER at the Pre-Construction conference.
- B. Should the CONTRACTOR find it necessary to use any additional land for its camp or for other purposes during the construction of the WORK, it shall provide for the use of such lands at its own expense.
- C. The CONTRACTOR shall not store materials, tools, or equipment in areas to be occupied by the public unless specifically authorized by the ENGINEER.

1.3 PARKING

- A. The CONTRACTOR shall direct its employees to park in areas at the site as directed by the ENGINEER.
- B. Traffic and parking areas available to the public shall be maintained in a sound condition, free of excavated material, construction equipment, mud, and construction materials. The CONTRACTOR shall repair breaks, potholes, low areas which collect standing water, and other deficiencies that are the result of the CONTRACTOR's WORK.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 015600 - TEMPORARY ENVIRONMENTAL CONTROLS

PART 1 - GENERAL

1.1 RUBBISH CONTROL

A. During the progress of the WORK, the CONTRACTOR shall keep the site of the WORK and other areas used by it in a neat and clean condition, and free from any accumulation of rubbish. The CONTRACTOR shall dispose of all rubbish and waste materials of any nature occurring at the WORK site, and shall establish regular intervals of collection and disposal of such materials and waste. The CONTRACTOR shall also keep its haul roads free from dirt, rubbish, and unnecessary obstructions resulting from its operations. Disposal of all rubbish and surplus materials shall be off the site of construction in accordance with local codes and ordinances governing locations and methods of disposal, and in conformance with all applicable safety laws, and to the particular requirements of Part 1926 of the OSHA Safety and Health Standards for Construction.

1.2 SANITATION

- A. Toilet Facilities: Fixed or portable chemical toilets shall be provided wherever needed for the use of employees. Toilets at construction job sites shall conform to the requirements of Part 1926 of the OSHA Standards for Construction.
- B. Sanitary and Other Organic Wastes: The CONTRACTOR shall establish a regular daily collection of all sanitary and organic wastes. All wastes and refuse from sanitary facilities provided by the CONTRACTOR or organic material wastes from any other source related to the CONTRACTOR's operations shall be disposed of away from the site in a manner satisfactory to the ENGINEER and in accordance with all laws and regulations pertaining thereto.

1.3 CHEMICALS

A. All chemicals used during Project construction or furnished for Project operation, whether defoliant, soil sterilant, herbicide, pesticide, disinfectant, polymer, reactant or of other classification, shall show approval of either the U.S. Environmental Protection Agency or the U.S. Department of Agriculture. Use of all such chemicals and disposal of residues shall be in strict accordance with the printed instructions of the manufacturer. In addition, see the requirements set forth in paragraph 6.11 of the General Conditions.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 1 - GENERAL

1.1 GENERAL

- A. The word "Products," as used herein, is defined to include purchased items for incorporation into the WORK, regardless of whether specifically purchased for Project or taken from CONTRACTOR's stock of previously purchased products. The word "Materials," is defined as products which must be substantially cut, shaped, worked, mixed, finished, refined, or otherwise fabricated, processed, installed, or applied to form units of work. The word "Equipment" is defined as products with operational parts, regardless of whether motorized or manually operated, and particularly including products with service connections (wiring, piping, and other like items). Definitions in this paragraph are not intended to negate the meaning of other terms used in Contract Documents, including "specialties," "systems," "structure," "finishes," "accessories," "furnishings," special construction," and similar terms, which are self-explanatory and have recognized meanings in the construction industry.
- B. Neither "Products" nor "Materials" nor "Equipment" includes machinery and equipment used for preparation, fabrication, conveying and erection of the WORK.

1.2 QUALITY ASSURANCE

- A. Source Limitations: To the greatest extent possible for each unit of work, the CONTRACTOR shall provide products, materials, or equipment of a singular generic kind from a single source.
- B. Compatibility of Options: Where more than one choice is available as options for CONTRACTOR's selection of a product, material, or equipment, the CONTRACTOR shall select an option which is compatible with other products, materials, or equipment already selected. Compatibility is a basic general requirement of product/material selections.

1.3 PRODUCT DELIVERY-STORAGE-HANDLING

A. The CONTRACTOR shall deliver, handle, and store products in accordance with manufacturer's written recommendations and by methods and means which will prevent damage, deterioration, and loss including theft. Delivery schedules shall be controlled to minimize long-term storage of products at site and overcrowding of construction spaces. In particular, the CONTRACTOR shall ensure minimum holding or storage times for products recognized to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft, and other sources of loss.

1.4 TRANSPORTATION AND HANDLING

- A. Products shall be transported by methods to avoid product damage and shall be delivered in undamaged condition in manufacturer's unopened containers or packaging.
- B. The CONTRACTOR shall provide equipment and personnel to handle products, materials, and equipment by methods to prevent soiling and damage.

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050

C. The CONTRACTOR shall provide additional protection during handling to prevent marring and otherwise damaging products, packaging, and surrounding surfaces.

1.5 STORAGE AND PROTECTION

- A. Products shall be stored in accordance with manufacturer's written instructions, with seals and labels intact and legible. Sensitive products shall be stored in weather-tight climate controlled enclosures and temperature and humidity ranges shall be maintained within tolerances required by manufacturer's written instructions.
- B. For exterior storage of fabricated products, they shall be placed on sloped supports above ground. Products subject to deterioration shall be covered with impervious sheet covering; ventilation shall be provided to avoid condensation.
- C. Loose granular materials shall be stored on solid surfaces in a well-drained area and shall be prevented from mixing with foreign matter.
- D. Storage shall be arranged to provide access for inspection. The CONTRACTOR shall periodically inspect to assure products are undamaged and are maintained under required conditions.
- E. Storage shall be arranged in a manner to provide access for maintenance of stored items and for inspection.

1.6 MAINTENANCE OF STORAGE

- A. Stored products shall be periodically inspected on a scheduled basis. The CONTRACTOR shall maintain a log of inspections and shall make said log available on request.
- B. The CONTRACTOR shall verify that storage facilities comply with manufacturer's product storage requirements.
- C. The CONTRACTOR shall verify that manufacturer-required environmental conditions are maintained continually.
- D. The CONTRACTOR shall verify that surfaces of products exposed to the elements are not adversely affected and that any weathering of finishes does not occur.
- E. For mechanical and electrical equipment, the CONTRACTOR shall provide a copy of the manufacturer's service instructions with each item and the exterior of the package shall contain notice that instructions are included.
- F. Products shall be serviced on a regularly scheduled basis, and a log of services shall be maintained and submitted as a record document prior to acceptance by the OWNER in accordance with the Contract Documents.

1.7 PROPOSED SUBSTITUTES OR "OR-EQUAL" ITEM SUBMITTAL

A. Whenever materials or equipment are specified or described in the Contract Documents by using the

name of a proprietary item or the name of a particular Supplier, the naming of the item is intended to establish the type, function, and quality required. If the name is followed by the words "or-equal" indicating that a substitution is permitted, materials or equipment of other Suppliers may be accepted by the ENGINEER if sufficient information is submitted by the CONTRACTOR to allow the ENGINEER to determine that the material or equipment proposed is equivalent or equal to that named, subject to the following requirements:

- 1. The burden of proof as to the type, function, and quality of any such substitute material or equipment shall be upon the CONTRACTOR.
- 2. The ENGINEER will be the sole judge as to the type, function, and quality of any such substitute material or equipment and the ENGINEER's decision shall be final.
- 3. The ENGINEER may require the CONTRACTOR to furnish at the CONTRACTOR's expense additional data about the proposed substitute.
- 4. The OWNER may require the CONTRACTOR to furnish at the CONTRACTOR's expense a special performance guarantee or other surety with respect to any substitute.
- 5. Acceptance by the ENGINEER of a substitute item proposed by the CONTRACTOR shall not relieve the CONTRACTOR of the responsibility for full compliance with the Contract Documents and for adequacy of the substitute item.
- 6. The CONTRACTOR shall be responsible for resultant changes and all additional costs which the accepted substitution requires in the CONTRACTOR's WORK, the WORK of its Subcontractors and of other contractors, and shall effect such changes without cost to the OWNER.
- B. The procedure for review by the ENGINEER will include the following:
 - 1. If the CONTRACTOR wishes to furnish or use a substitute item of material or equipment, the CONTRACTOR shall make written application to the ENGINEER on the "Substitution Request Form" for acceptance thereof.
 - 2. Unless otherwise provided by law or authorized in writing by the ENGINEER, the "Substitution Request Form(s)" shall be submitted within the 35-day period after award of the contract.
 - 3. Wherever a proposed substitute material or equipment has not been submitted within said 35-day period, or wherever the submission of a proposed substitute material or equipment has been judged to be unacceptable by the ENGINEER, the CONTRACTOR shall provide material or equipment named in the Contract Documents.
 - 4. The CONTRACTOR shall certify that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified, and be suited to the same use as that specified.
 - 5. The ENGINEER will be allowed a reasonable time within which to evaluate each proposed substitute. In no case will this reasonable time period be less than 30 days.
 - 6. As applicable, no shop drawing submittals will be made for a substitute item nor will any substitute item be ordered, installed, or utilized without the ENGINEER's prior written acceptance of the CONTRACTOR's "Substitution Request Form" which will be evidenced by a Change Order.
 - 7. The ENGINEER will record the time required by the ENGINEER in evaluating substitutions proposed by the CONTRACTOR and in making changes in the Contract Documents occasioned thereby. Whether or not the ENGINEER accepts a proposed substitute, the CONTRACTOR shall reimburse the OWNER for the charges of the ENGINEER for evaluating each proposed substitute.
- C. The CONTRACTOR's application using the "Substitution Request Forms" shall contain the

following statements and/or information which shall be considered by the ENGINEER in evaluating the proposed substitution:

- 1. The evaluation and acceptance of the proposed substitute will not prejudice the CONTRACTOR's achievement of substantial completion on time.
- 2. Whether or not acceptance of the substitute for use in the WORK will require a change in any of the Contract Documents to adopt the design to the proposed substitute.
- 3. Whether or not incorporation or use of the substitute in connection with the WORK is subject to payment of any license fee or royalty.
- 4. All variations of the proposed substitute for that specified will be identified.
- 5. Available maintenance, repair, and replacement service and its estimated cost will be indicated.
- 6. Itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including cost of redesign and claims of other contractors affected by the resulting change.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

PART 1 - GENERAL

1.1 CLOSEOUT TIMETABLE

A. The CONTRACTOR shall establish dates for equipment testing, acceptance periods, and on-site instructional periods (as required under the contract). Such dates shall be established not less than one week prior to beginning any of the foregoing items, to allow the OWNER, the ENGINEER, and their authorized representatives sufficient time to schedule attendance at such activities.

1.2 SUBSTANTIAL COMPLETION

- A. Before requesting inspection for certification of Substantial Completion, complete the following:
 - 1. In the Application for Payment that coincides with the date Substantial Completion is claimed, show 100 percent completion for the portion of the WORK claimed substantially complete.
 - 2. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.
 - 3. Submit record Drawings, maintenance manuals, damage or settlement survey, property survey, and similar record information.
 - 4. Changeover permanent locks and transmit keys to the ENGINEER.
 - 5. Complete start-up testing of systems, and instruction of CBJ Maintenance personnel. Remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
 - 6. Complete final clean-up. Touch-up and repair and restore marred exposed finishes.

1.3 INSPECTION PROCEDURES

- A. Upon receipt of a request for inspection for Substantial Completion, the ENGINEER will proceed and advise the CONTRACTOR of unfilled requirements. The ENGINEER will prepare the Certificate of Substantial Completion following inspection, or advise the CONTRACTOR of construction that must be completed or corrected before the certificate will be issued.
- B. The ENGINEER will reinspect the WORK upon receipt of notice by the CONTRACTOR that the WORK has been completed, except items whose completion has been delayed because of circumstances acceptable to the ENGINEER. If reinspection is requested and the CONTRACTOR has not completed all punch list items, the cost of that inspection will be paid by the CONTRACTOR. Upon completion of reinspection, the ENGINEER will prepare a certificate of final acceptance, or advise the CONTRACTOR of WORK that is incomplete or of obligations that have not been fulfilled but are required for final acceptance. If necessary, reinspection will be repeated.
- C. The ENGINEER will repeat inspection when requested and assured by the CONTRACTOR that the WORK has been substantially completed.
- D. Results of the completed inspection will form the basis of requirements for final acceptance.

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050

1.4 FINAL ACCEPTANCE

- A. Before requesting inspection for certification of final acceptance and final payment, complete and submit the following:
 - 1. Submit final payment request.
 - 2. Submit a final Change Order request.
 - 3. Submit a copy of the final inspection list stating that each item has been completed or otherwise resolved for acceptance.
 - 4. Submit final meter readings for utilities, a record of stored fuel, and similar data as of Substantial Completion.
 - 5. Submit consent of surety to final payment.
 - 6. Submit evidence of continuing insurance coverage complying with insurance requirements.
 - 7. Submit those items listed under Article 1.5 of this section as they apply.
 - 8. Written guarantees, where required.
 - 9. Maintenance stock items; spare parts; special tools, where required.
 - 10. Certificates of inspection and acceptance by local governing agencies having jurisdiction.
 - 11. Releases from all parties who are entitled to claims against the subject Project, property, or improvement pursuant to the provisions of law.
 - 12. Completed Certificate of Compliance and Release for the CONTRACTOR involved in the WORK included as part of this section.
 - 13. Final Subcontractor list complete with final subcontract amounts and include all equipment rentals (with operators).
 - 14. Before final payment can be made, the CONTRACTOR shall supply a copy of the "Notice of Completion of Public Works" form approved by Wage and Hour Administration of the Labor Standards and Safety Division of the Alaska Department of Labor and Workforce Development.
 - 15. Submit original Items 12 and 13 and a copy of Item 14 to City ENGINEER.

1.5 FINAL SUBMITTALS

- A. Record Document Submittals: Do not use Record Documents for construction purposes; protect from loss in a secure location; provide access to Record Documents for the ENGINEER's reference.
- B. Record Drawings: Maintain a clean, undamaged set of blue or blackline prints of Contract Drawings and Shop Drawings (this includes Architectural, Structural/Civil, Mechanical and Electrical). Mark-up these Drawings to show the actual installation. Mark whichever Drawing is most capable of showing conditions accurately. Give particular attention to concealed elements that would be difficult to measure and record at a later date. Organize record Drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover. Record Drawings shall be kept current with the WORK's progress and will be checked prior to each payment.
- C. Record Specifications: Maintain one copy of the Contract Documents, including Addenda. Mark to show variations in actual WORK performed in comparison with the specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot be readily discerned later by direct observation. Note related record Drawing information and product data. Upon completion of the WORK, submit record Specifications to the ENGINEER for the OWNER's records.

- D. Maintenance Manuals: Organize maintenance data into sets of manageable size. Bind in individual heavy-duty 2-inch (maximum), 3-ring vinyl-covered binders, with pocket folders for folded sheet information. Mark identification on front and spine of each binder. Include the following information:
 - 1. Emergency instructions.
 - 2. Spare parts list.
 - 3. Copies of warranties.
 - 4. Recommended "turn around" cycles.
 - 5. Inspection procedures.
 - 6. Shop Drawings and product data.
- D. Operating and Maintenance Instructions: Arrange for the installer of equipment that requires regular maintenance to meet with CBJ personnel to provide instruction in proper operation and maintenance. Include a detailed review of maintenance manuals, agreements, warranties and bonds. As part of instruction for operating equipment, demonstrate all necessary safety procedures.
- E. Before final payment can be made, the CONTRACTOR shall supply a copy of the "Notice of Completion of Public Works" form approved by Wage and Hour Administration of the Labor Standards and Safety Division of the Alaska Department of Labor and Workforce Development.

1.6 MAINTENANCE AND GUARANTEE

- A. The CONTRACTOR shall comply with the maintenance and guarantee requirements contained in Article 13 of the General Conditions.
- B. Replacement of earth fill or backfill, where it has settled below the required finish elevations, shall be considered as a part of such required repair work, and any repair or resurfacing constructed by the CONTRACTOR which becomes necessary by reason of such settlement shall likewise be considered as a part of such required repair work unless the CONTRACTOR shall have obtained a statement in writing from the affected private owner or public agency releasing the OWNER from further responsibility in connection with such repair or resurfacing.
- C. The CONTRACTOR shall make all repairs and replacements promptly upon receipt of written order from the OWNER. If the CONTRACTOR fails to make such repairs or replacements promptly, the OWNER reserves the right to do the WORK and the CONTRACTOR and its surety shall be liable to the OWNER for the cost thereof.

PART 2 - MATERIALS (Not Used)

PART 3 - EXECUTION (Not Used)

COMPLIANCE CERTIFICATE AND RELEASE FORM

PROJECT: <u>Cruise Ship Berth Security Checkpoints</u> CBJ Contract No. DH19-050

The CONTRACTOR must complete and submit this to the City Engineer. The CONTRACTOR shall complete this form with respect to the entire contract.

Completed forms must be submitted upon completion of the Project. All requirements and submittals must be met before final payment will be made to the CONTRACTOR.

I certify that the following and any referenced attachments are true:

- All WORK has been performed, materials supplied, and requirements met in accordance with the applicable plans, specifications, and Contract Documents.
- All suppliers and Subcontractors have been paid in full with no claims for labor, materials, or other services outstanding. If all Subcontractors and suppliers are not paid in full, please explain on a separate sheet.
- All employees have been paid not less that the current prevailing wage rates set by the State of Alaska (or U.S. Department of Labor, as applicable).
- All equal employment opportunity, certified payroll and other reports have been filed in accordance with the prime contract.
- The attachment list of Subcontractors is complete (required from CONTRACTORs). The City Engineer was advised and approved of all Subcontractors before WORK was performed and has approved any substitutions of Subcontractors.
- All DBE firms listed as a precondition of the prime contract award must have performed a commercially useful function in order for the work to count to a DBE goal. All DBE firms performed the WORK stated and have received at least the amount claimed for credit in the Contract Documents.
- All DBE Subcontractors must attach a signed statement of the payment amount received, the nature of WORK performed, whether any balance is outstanding, and indicate that no rebates are involved.
- If the amount paid is less than the amount originally claimed for DBE credit, the CONTRACTOR has attached approval from the City Engineer for underutilization.

I understand it is unlawful to misrepresent information in order to receive a payment which would otherwise be withheld if these conditions were not met. I am an authorized agent of this firm and sign this freely and voluntarily. The foregoing statements are true and apply to the following project contractor.

Firm Name

Capacity: CONTRACTOR

Signed

Date

Printed Name and Title

PROJECT CLOSEOUT Page 017000-4

Return completed form to: Gary Gillette, Port Engineer, City and Borough of Juneau, 155 South Seward Street, Juneau, AK 99801. Call (907) 586-0873 if we can be of further assistance or if you have any questions.

SECTION 017040 - FINAL CLEAN-UP AND SITE RESTORATION

PART 1 - GENERAL

1.1 DESCRIPTION

A. The WORK under this Section includes providing all supervision, labor, materials, tools and equipment necessary for final clean-up and restoration of all areas disturbed by construction activities, to a condition equal to, or better than, before construction started. This does not include clean-up or restoration incidental to, or directly provided for by other construction items.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Any materials required shall conform to the appropriate Section of these Specifications.

PART 3 - EXECUTION

- 3.1 GENERAL
 - A. The CONTRACTOR shall promptly remove from the vicinity of the completed WORK and all sites disturbed by the construction, all rubbish and debris, unused materials, concrete forms, construction equipment, and temporary structures and facilities used during construction and shall grade the sites so that no standing water is evident. Final acceptance of the WORK by the OWNER will be withheld until the CONTRACTOR has satisfactorily complied with the foregoing requirements for final clean-up of the Project site.
 - B. If the CONTRACTOR has obtained material from the CBJ/State pit, the excavated area shall be cleaned up and any stipulations required by the Individual Mining Plan shall be completed. The gravel pit overhead charge shall be paid to CBJ within 60 days after removal of material from the pit.

3.2 FINAL CLEANING OF BUILDINGS

- A. The CONTRACTOR shall employ experienced workers for final cleaning. Clean each surface to the condition expected in a commercial building cleaning and maintenance program. Complete the following before requesting inspection for certification of Substantial Completion:
 - 1. Remove labels that are not permanent labels.
 - 2. Clean transparent materials. Remove glazing compound. Replace chipped or broken glass.
 - 3. Clean exposed hard-surfaced finishes to a dust-free condition, free of stains, films and similar foreign substances. Restore reflective surfaces to their original reflective condition. Leave concrete floors broom clean. Vacuum carpeted surfaces.

SECTION 017040 - FINAL CLEAN-UP AND SITE RESTORATION

- 4. Wipe surfaces of mechanical and electrical equipment. Remove excess lubrication. Clean plumbing fixtures to a sanitary condition. Clean light fixtures and lamps.
- 5. Clean the site of rubbish, litter and other foreign substances. Sweep paved areas, remove stains, spills and other foreign deposits. Rake grounds that are neither paved nor planted, to a smooth even-textured surface.
- 6. Remove temporary protection and facilities.
- 7. Comply with regulations of authorities having jurisdiction and safety standards for cleaning. Remove waste materials from the site and dispose of in a lawful manner.

SECTION 017320 - SELECTIVE DEMOLITION

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the contract, including General and Supplementary Conditions and other Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Demolition and removal of selected items.
- B. Related Sections include the following:
 - 1. Division 1 Section 010100 Summary of WORK for use of the premises and phasing requirements.
 - 2. Division 1 Section 010450 Cutting and Patching for cutting and patching procedures for selective demolition operations.

1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and legally dispose of them off-site, unless indicated to be removed and salvaged or removed and reinstalled.
- B. Remove and Salvage: Detach items from existing construction and deliver them to OWNER.
- C. Remove and Reinstall: Detach items from existing construction, prepare them for reuse, and reinstall them where indicated.
- D. Existing to Remain: Existing items of construction that are not to be removed and that are not otherwise indicated to be removed, removed and salvaged, or removed and reinstalled.

1.4 MATERIALS OWNERSHIP

A. Except for items or materials indicated to be reused, salvaged, reinstalled, or otherwise indicated to remain OWNER's property, demolished materials shall become CONTRACTOR's property and shall be removed from Project site.

1.5 SUBMITTALS

- A. Schedule of Selective Demolition Activities: Indicate the following:
 - 1. Detailed sequence of selective demolition and removal WORK, with starting and ending dates for each activity. Ensure OWNER's on-site operations are uninterrupted.

SECTION 017320 - SELECTIVE DEMOLITION

2. Interruption of utility services.

1.6 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.

1.7 PROJECT CONDITIONS

- A. OWNER shall occupy portions of buildings immediately adjacent to selective demolition area. Conduct selective demolition so OWNER's operations will not be disrupted. Provide not less than 48 hours' notice to OWNER of activities that will affect OWNER's operations.
- B. OWNER assumes no responsibility for condition of areas to be selectively demolished.
- C. Storage or sale of removed items or materials on-site will not be permitted.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Survey existing conditions and correlate with requirements indicated to determine extent of selective demolition required.
- B. When unanticipated mechanical, electrical, or structural elements that conflict with intended function or design are encountered, investigate and measure the nature and extent of conflict. Promptly submit a written report to ENGINEER.
- C. Perform surveys, sampling and other documentation as required by regulatory agencies as the WORK progresses to detect hazards resulting from selective demolition activities.

3.2 UTILITY SERVICES

- A. Existing Utilities: Maintain services indicated to remain and protect them against damage during selective demolition operations.
- B. Do not interrupt existing utilities serving occupied or operating facilities unless authorized in writing by OWNER and authorities having jurisdiction. Provide temporary services during interruptions to existing utilities, as acceptable to OWNER and to authorities having jurisdiction.
 - 1. Provide at least 48 hours notice to OWNER if shutdown of service is required.

SECTION 017320 - SELECTIVE DEMOLITION

3.3 PREPARATION

- A. Site Access and Temporary Controls: Conduct selective demolition and debris-removal operations to ensure minimum interference with roads, streets, walks, walkways, and other adjacent occupied and used facilities.
 - 1. Do not close or obstruct garage areas, hallways, streets, walks, walkways, parking areas, or other adjacent occupied or used without permission from OWNER and authorities having jurisdiction. Provide alternate routes around closed or obstructed areas if required by OWNER or governing regulations.
 - 2. Protect existing structure, finishes, waterproofing, site improvements, appurtenances, and landscaping to remain.
- B. Temporary Facilities: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent facilities or surfaces to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.

3.4 POLLUTION CONTROLS

- A. Disposal: Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
 - 1. Remove debris from elevated portions of building by chute, hoist, or other device that will convey debris to grade level in a controlled descent.
- B. Cleaning: Clean adjacent structures and improvements of dust, dirt, and debris caused by selective demolition operations. Return adjacent areas to condition existing before selective demolition operations began.
- C. General: Promptly dispose of demolished materials. Do not allow demolished materials to accumulate on-site.
- D. Burning: Do not burn demolished materials.
- E. Disposal: Transport demolished materials off OWNER's property and legally dispose of them.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Structural steel.

1.2 DEFINITIONS

A. Structural Steel: Elements of the structural frame indicated on Drawings and as described in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."

1.3 COORDINATION

A. Coordinate installation of anchorage items to be embedded in or attached to other construction without delaying the Work. Provide setting diagrams, sheet metal templates, instructions, and directions for installation.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Shop Drawings: Show fabrication of structural-steel components.
 - 1. Include details of cuts, connections, splices, camber, holes, and other pertinent data.
 - 2. Include embedment Drawings.
 - 3. Indicate welds by standard AWS symbols, distinguishing between shop and field welds, and show size, length, and type of each weld. Show backing bars that are to be removed and supplemental fillet welds where backing bars are to remain.
 - 4. Indicate type, size, and length of bolts, distinguishing between shop and field bolts. Identify pretensioned and slip-critical, high-strength bolted connections.
- C. Welding Procedure Specifications (WPSs) and Procedure Qualification Records (PQRs): Provide according to AWS D1.1/D1.1M, "Structural Welding Code - Steel," for each welded joint whether prequalified or qualified by testing, including the following:
 - 1. Power source (constant current or constant voltage).
 - 2. Electrode manufacturer and trade name, for demand critical welds.

1.5 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For fabricator.
- B. Welding certificates.

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050

- C. Mill test reports for structural steel, including chemical and physical properties.
- D. Product Test Reports: For the following:
 - 1. Bolts, nuts, and washers including mechanical properties and chemical analysis.
 - 2. Direct-tension indicators.
 - 3. Tension-control, high-strength, bolt-nut-washer assemblies.

1.6 QUALITY ASSURANCE

- A. Fabricator Qualifications: A qualified fabricator that participates in the AISC Quality Certification Program and is designated an AISC-Certified Plant, Category STD, or is accredited by the IAS Fabricator Inspection Program for Structural Steel (AC 172).
- B. Comply with applicable provisions of the following specifications and documents:
 - 1. AISC 303.
 - 2. AISC 341.
 - 3. AISC 360.
 - 4. RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."

1.7 DELIVERY, STORAGE, AND HANDLING

- A. Store materials to permit easy access for inspection and identification. Keep steel members off ground and spaced by using pallets, dunnage, or other supports and spacers. Protect steel members and packaged materials from corrosion and deterioration.
 - 1. Do not store materials on structure in a manner that might cause distortion, damage, or overload to members or supporting structures. Repair or replace damaged materials or structures as directed.
- B. Store fasteners in a protected place in sealed containers with manufacturer's labels intact.
 - 1. Fasteners may be repackaged provided Owner's testing and inspecting agency observes repackaging and seals containers.
 - 2. Clean and relubricate bolts and nuts that become dry or rusty before use.
 - 3. Comply with manufacturers' written recommendations for cleaning and lubricating ASTM F 1852 fasteners and for retesting fasteners after lubrication.

PART 2 - PRODUCTS

- 2.1 STRUCTURAL-STEEL MATERIALS
 - A. W-Shapes: ASTM A 992/A 992M.
 - B. Channels, Angles-Shapes: ASTM A 36/A 36M.
 - C. Plate and Bar: ASTM A 36/A 36M.

- D. Cold-Formed Hollow Structural Sections: ASTM A 500/A 500M, Grade B, structural tubing.
- E. Welding Electrodes: Comply with AWS requirements.

2.2 BOLTS, CONNECTORS, AND ANCHORS

- A. Zinc-Coated High-Strength Bolts, Nuts, and Washers: ASTM A 325, Type 1, heavy-hex steel structural bolts; ASTM A 563, Grade DH heavy-hex carbon-steel nuts; and ASTM F 436, Type 1, hardened carbon-steel washers.
 - 1. Finish: Hot-dip zinc coating.
- B. Tension-Control, High-Strength Bolt-Nut-Washer Assemblies: ASTM F 1852, Type 1, heavyhex head assemblies consisting of steel structural bolts with splined ends, heavy-hex carbonsteel nuts, and hardened carbon-steel washers.
 - 1. Finish: Mechanically deposited zinc coating.
- C. Headed Bolts and Rods: ASTM F 1554, Grade 36, straight.
 - 1. Nuts: ASTM A 563 heavy-hex carbon steel.
 - 2. Plate Washers: ASTM A 36/A 36M carbon steel.
 - 3. Washers: ASTM F 436, Type 1, hardened carbon steel.
 - 4. Finish: Hot-dip zinc coating, ASTM A 153/A 153M, Class C.
- D. Threaded Rods: ASTM A 36/A 36M.
 - 1. Nuts: ASTM A 563 heavy-hex carbon steel.
 - 2. Washers: ASTM A 36/A 36M carbon steel.
 - 3. Finish: Hot-dip zinc coating, ASTM A 153/A 153M, Class C.

2.3 PRIMER

A. Galvanizing Repair Paint: ASTM A 780/A 780M.

2.4 FABRICATION

- A. Structural Steel: Fabricate and assemble in shop to greatest extent possible. Fabricate according to AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," and to AISC 360.
 - 1. Identify high-strength structural steel according to ASTM A 6/A 6M and maintain markings until structural steel has been erected.
 - 2. Mark and match-mark materials for field assembly.
 - 3. Complete structural-steel assemblies, including welding of units, before galvanizing.
- B. Thermal Cutting: Perform thermal cutting by machine to greatest extent possible.
 - 1. Plane thermally cut edges to be welded to comply with requirements in AWS D1.1/D1.1M.

- C. Bolt Holes: Cut, drill, mechanically thermal cut, or punch standard bolt holes perpendicular to metal surfaces.
- D. Finishing: Accurately finish ends of columns and other members transmitting bearing loads.
- E. Cleaning: Clean and prepare steel surfaces that are to remain unpainted according to SSPC-SP 3, "Power Tool Cleaning."
- F. Holes: Provide holes required for securing other work to structural steel and for other work to pass through steel members.
 - 1. Cut, drill, or punch holes perpendicular to steel surfaces. Do not manually thermally cut bolt holes or enlarge holes by burning.
 - 2. Baseplate Holes: Cut, drill, mechanically thermal cut, or punch holes perpendicular to steel surfaces.
 - 3. Weld threaded nuts to framing and other specialty items indicated to receive other work.

2.5 SHOP CONNECTIONS

- A. High-Strength Bolts: Shop install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.
 - 1. Joint Type: Slip critical.
- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
 - 1. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in AISC 303 for mill material.

2.6 GALVANIZING

- A. Hot-Dip Galvanized Finish: Apply zinc coating by the hot-dip process to structural steel according to ASTM A 123/A 123M.
 - 1. Fill vent and drain holes that are exposed in the finished Work unless they function as weep holes, by plugging with zinc solder and filing off smooth.
 - 2. Galvanize all structural steel unless noted otherwise.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify, with steel erector present, elevations of bearing surfaces and locations of anchor rods, bearing plates, and other embedments for compliance with requirements.
 - 1. Inspect existing conditions. Include bearing surfaces, anchor rods, bearing plates, and other embedments showing dimensions, locations, angles, and elevations.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Provide temporary shores, guys, braces, and other supports during erection to keep structural steel secure, plumb, and in alignment against temporary construction loads and loads equal in intensity to design loads. Remove temporary supports when permanent structural steel, connections, and bracing are in place unless otherwise indicated.

3.3 ERECTION

- A. Set structural steel accurately in locations and to elevations indicated and according to AISC 303 and AISC 360.
- B. Baseplates: Clean bearing surfaces of bond-reducing materials, and roughen surfaces prior to setting plates.
 - 1. Set plates for structural members on wedges, shims, or setting nuts as required.
 - 2. Weld plate washers to top of baseplate.
 - 3. Snug-tighten anchor rods after supported members have been positioned and plumbed. Do not remove wedges or shims but, if protruding, cut off flush with edge of plate before packing with grout.
- C. Maintain erection tolerances of structural steel within AISC 303, "Code of Standard Practice for Steel Buildings and Bridges."
- D. Align and adjust various members that form part of complete frame or structure before permanently fastening. Before assembly, clean bearing surfaces and other surfaces that are in permanent contact with members. Perform necessary adjustments to compensate for discrepancies in elevations and alignment.
 - 1. Level and plumb individual members of structure.
 - 2. Make allowances for difference between temperature at time of erection and mean temperature when structure is completed and in service.
- E. Splice members only where indicated.
- F. Do not use thermal cutting during erection unless approved by Architect. Finish thermally cut sections within smoothness limits in AWS D1.1/D1.1M.
- G. Do not enlarge unfair holes in members by burning or using drift pins. Ream holes that must be enlarged to admit bolts.

3.4 FIELD CONNECTIONS

A. High-Strength Bolts: Install high-strength bolts according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts" for type of bolt and type of joint specified.

- 1. Joint Type: Slip critical.
- B. Weld Connections: Comply with AWS D1.1/D1.1M for tolerances, appearances, welding procedure specifications, weld quality, and methods used in correcting welding work.
 - 1. Comply with AISC 303 and AISC 360 for bearing, alignment, adequacy of temporary connections, and removal of paint on surfaces adjacent to field welds.
 - 2. Remove backing bars or runoff tabs where indicated, back gouge, and grind steel smooth.
 - 3. Assemble and weld built-up sections by methods that maintain true alignment of axes without exceeding tolerances in AISC 303, "Code of Standard Practice for Steel Buildings and Bridges," for mill material.

3.5 FIELD QUALITY CONTROL

- A. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
 - 1. Verify structural-steel materials and inspect steel frame joint details.
 - 2. Verify weld materials and inspect welds.
 - 3. Verify connection materials and inspect high-strength bolted connections.
- B. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.
- C. Bolted Connections: Inspect and test bolted connections according to RCSC's "Specification for Structural Joints Using ASTM A 325 or A 490 Bolts."
- D. Welded Connections: Visually inspect field welds according to AWS D1.1/D1.1M.
 - 1. In addition to visual inspection, test and inspect field welds according to AWS D1.1/D1.1M and the following inspection procedures, at testing agency's option:
 - a. Liquid Penetrant Inspection: ASTM E 165.
 - b. Magnetic Particle Inspection: ASTM E 709; performed on root pass and on finished weld. Cracks or zones of incomplete fusion or penetration are not accepted.
 - c. Ultrasonic Inspection: ASTM E 164.
 - d. Radiographic Inspection: ASTM E 94.

3.6 REPAIRS AND PROTECTION

A. Galvanized Surfaces: Clean areas where galvanizing is damaged or missing and repair galvanizing to comply with ASTM A 780/A 780M using zinc alloy repair sticks and top coated with brush applied cold galvanized paint.

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Stonewood Panels: Solid phenolic panels for exterior soffit cladding of commercial and institutional buildings.

1.2 REFERENCES

- A. ASTM D638 10 Standard Test Method for Tensile Properties of Plastics.
- B. ASTM D790 10 Standard Test Methods for Flexural Properties of Unreinforced and Reinforced Plastics and Electrical Insulating Materials.
- C. ASTM E84 12 Standard Test Method for Surface Burning Characteristics of Building Materials.
- D. NEMA Standards Publication LD3-2005. High pressure decorative laminates.
- E. 2012 International Building Code, Chapter 14 Exterior Walls.

1.3 PERFORMANCE REQUIREMETNS

- A. Delegated Design: Design solid phenolic exterior wall assembly, including panels, extrusions and metal wall furring channels, with comprehensive engineering analysis by a qualified professional engineer licensed in the State of Alaska, using performance requirements and design criteria indicated.
- B. Structural Performance: Provide metal wall panel assemblies capable of withstanding the effects of indicated loads and stresses within limits and under conditions indicated, per ASTM E 72.
 - a. Wind Loads: determine loads based on ASCE 7, importance factor, exposure category, and basic wind speed in effect in the project location.
 - b. Limits of Deflection: Wall panel assembly shall withstand scheduled wind pressure with L/120 deflection of panel perimeter normal to plane of wall.

1.4 SUBMITTALS

- A. Product Data: Submit manufacturer's printed product literature and specifications including fabrication and assembly.
- B. Samples: Submit manufacturer's standard 3"x3" samples of panel cladding materials representative of colors and texture.
- C. Manufacturer's Certification: Submit manufacturer's certification that materials comply with specified requirements and are suitable for intended application.
- D. Warranty: Submit manufacturer's standard warranty.
- E. Installation Instructions (descriptive manual).

- F. Shop Drawings: Submit complete sets of fabrication/installation drawings including panel dimensions, thickness, location of joints, method of anchorage, number of anchors, supports, accessories, etc. Prepare shop drawings from as-built dimensions. Show secondary metal hat furring and other shapes with associated fasteners and spacing. Conform to joint patterns shown on architectural drawings.
- G. Engineering Drawings: For exterior panel assembly indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer licensed in the State of Alaska and responsible for their preparation. Engineer shall have a minimum of 5 years experience with projects of similar scope. Structural Calculations shall include description of design criteria and engineering analysis depicting stress and deflection (stiffness) requirements. Drawings shall include configuration and design of attachments including framing components and fasteners necessary to attach the metal furring substrate system to the existing soffit structure, as well as fasteners necessary to attach the panel system to the furring substrate. Include furring spacing, configuration and gages, as well as all fastener types, sizes and spacing.

1.5 QUALITY ASSURANCE

- A. Manufacturer's Qualifications:
 - 1. Sufficient plant facilities to provide quality and quantity of materials as required without delaying progress of the work.
 - 2. Minimum of 20 years of experience in paper saturation of phenolic resin, and producing phenolic paper laminate.

B. Fabricator

- 1. Fabricated by the manufacturer, and/or;
- 2. Contracted by the customer, minimum 5 years of experience in fabrication work of exterior cladding system for the size and complexity of the projects.
- 3. Approved by the manufacturer.
- C. Installer
 - 1. Proven professional cladding system installer with a minimum of 5 years of documented experience.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Delivery: Deliver materials in manufacturer's original unopened containers/packages, with labels clearly identifying product name, manufacturer, color/texture, and weight.
- B. Storage:
 - 1. Store materials in clean, dry area in accordance with manufacturer's instructions.
 - 2. Keep package sealed until ready for use.
- C. Handling:
 - 1. Handle materials in accordance with manufacturer's instructions.
 - 2. Protect materials during handling to prevent damage.

1.7. WARRANTY

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050

A. Limited warranty: Fiberesin warrants that Stonewood Architectural Panels shall be free from material defects for a period of 10 years. Refer to <u>www.stonewoodpanels.com</u> for details. Provide matching warranty if an approved equal is selected.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Fiberesin Industries, Inc., PO Box 808, Oconomowoc, WI 53066. Phone: (262) 567-4427 Fax: (262) 567-4814, Web Site: <u>www.fiberesin.com</u>. Email: <u>info@fiberesin.com</u>.
- B. Alaska Representation: Exterior Technology Systems, Anchorage, (907) 227-0653

2.2 STONEWOOD EXTERIOR ARCHITECTURAL PANELS OR APPROVED EQUAL

- A. Material: Solid phenolic laminate panel with UV protection.
- B. Series: Exterior Panels; Stonewood Select
- C. Color as selected by Owner from manufacturer's full range. 2 colors to be selected.
- D. Finish: #60 Matte.
- E. Standard Size: 48"x96".
- F. Panel Thickness: 5/16", 8 mm.
- G. Panel Core: Standard black.
- H. Fire Rating: UL Class B.
- I. Paint all exposed metal furring black.

2.3 MINIMUM MATERIAL PROPERTIES

A. NEMA Requirements

Description	Test	NEMA Requirements			
Thickness			0.156"	0.250"	0.500"
Resistance to	3.6				
High Temperature		Slight Effect	No Effect	No Effect	No Effect
Ball Impact Resistance:	3.8				
Inches Drop		75"	90"+	96"+	96"+
Dimensional Change:					
Length (Machine	2 1 1				
Direction)	3.11	0.3% Maximum	0.25%	0.25%	0.25%
Width (Cross Direction)		0.7% Maximum	0.50%	0.50%	0.50%
Weight Per Unit Area					
Lbs/ft^2			1.07	1.71	3.42

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050 SOLID PHENOLIC WALL CLADDING Page 074200 - 3

Kg/m ²	5.2	8.35	16.7
Density (PCF)	82	82	82

B. Mechanical Properties

Property	NEMA Requirements	0.156"	0.250"	0.500"
Flexural Strength				
ASTM D-790				
MD (psi)	18,000	20,000	20,000	20,000
CD (psi)	12,000	16,000	16,000	16,000
Flexural Modulus				
ASTM D-790				
MD (psi)	1.6×10^{6}	$2.0 \ge 10^6$	2.0×10^6	2.0×10^6
CD (psi)	1.4×10^{6}	$1.5 \ge 10^6$	$1.5 \ge 10^6$	$1.5 \ge 10^6$
Tensile Modulus				
ASTM D-638				
MD (psi)	18,000	18,000	18,000	18,000
CD (psi)	12,000	13,000	13,000	13,000

C. Fire Resistance

Fire Resistance		Product Type	
		Class A	Class B
	Thickness	0.250"	0.250"
Flame Spread Index - ASTM E-84 (BLDG)*	:	15	30
Smoke Developed Values - ASTM E-84 (BL	LDG)*	15	105
Fire Rating* (Standard Product is Class B)		А	B*

* Test Method: ASTM E84-13a - Standard Test Method for Surface Burning Characteristics of Building Materials. Also known as NFPA 255, UL 723, and UBC 8-1.

D. Manufacturing Tolerance

Thickness (.156 to .375)	+/020
Thickness (above .375 to 1.000)	+/030
CNC Shaped size (Length -Width)	+/020
Drill Diameter	+/003
Drill Depth	+/020
CNC Hole to Hole	+/020
CNC Hole to Edge (1 Oper)	+/020
CNC Hole to Edge (2 Oper)	+/030
Routing - (Slots Width and Length)	+/015
Routing - (Slots Depth)	+/020

2.4. ACCESSORIES (FASTENERS & SUPPORTS)

- A. Panel Fastener: SFS SX3 #12-11 TORX Drive 304 Stainless Steel Self-Drilling fastener. Color to match panel.
- B. Horizontal Support Extrusions: NorthClad EF Aluminum Z-girts, 1-5/16" deep, .040" thickness. Installation and layout as per Fiberesin requirements and per the project shop drawings. Color: Black.

C. Provide exterior wall cladding system designed to withstand the effects of dead load, wind load, and accommodate hygrothermal expansion/contraction of the panel.

PART 3 – EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

A. Compliance: Comply with manufacturer's/fabricator's/supplier's product data, handling and installation instruction/manual, shop drawings, shipping container/package ticket identification, etc.

3.2. EXAMINATION

- A. Verify correct panels received, including dimension, tolerance, color/texture.
- B. Verify correct attachment system received for the specific project/job.
- C. Verify all the documents, including shop drawings and installation guidelines.
- D. Verify installation conditions are satisfactory to receive work of this Section before the commencement.
- E. Verify substrate installation is complete, flat, and true to plane.

3.3. PREPARATION

- A. Field Measurements: Verify prior to fabrication and installation of the cladding panel.
- B. Protect surrounding areas and surfaces to preclude damage during work of this Section.
- C. Lay out work before beginning installation as necessary for true, plumb, and aligned panel installations.
- D. Verify locations of joints and panel lengths.

3.4. INSTALLATION

- A. Conform to manufacturer's instructions and provisions of shop drawings.
- B. Conform to fastener's instructions for installation of fasteners.
- C. Install to allow hygrothermal expansion/contraction.
- D. Use appropriate techniques/tools to work with the panel.
- E. Do not force to fit, bend, or stretch/compress.
- F. Make cutting and fitting neat, square, and true. Where required, cut, de-burr edges, and clean filings from adjacent surfaces.
- G. Do not install damaged or questionable panels.

3.5. FIELD QUALITY CONTROL

A. Manufacturer's Field Service: Provide field services to ensure product installation is in accordance with manufacturer's/fabricator's/supplier's instructions and installation manuals, shop drawings, etc.

3.6. ADJUSTING

- A. Correct identified defects and irregularities.
- B. Replace damaged, soiled, and discolored work.

3.7. CLEANING

A. Leave installation clean and free from residue and debris from work of this Section.

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes aluminum windows for exterior locations.

1.2 ACTION SUBMITTALS

- A. Product Data: For each type of product.
 - 1. Include construction details, material descriptions, glazing and fabrication methods, dimensions of individual components and profiles, hardware, and finishes for aluminum windows.
- B. Shop Drawings: For aluminum windows.
 - 1. Include plans, elevations, sections, hardware, accessories, insect screens, operational clearances, and details of installation, including anchor, flashing, and sealant installation.
- C. Product Schedule: For aluminum windows. Use same designations indicated on Drawings.

1.3 INFORMATIONAL SUBMITTALS

- A. Qualification Data: For manufacturer and Installer.
- B. Product Test Reports: For each type of aluminum window, for tests performed by a qualified testing agency.
- C. Field quality-control reports.
- D. Sample Warranties: For manufacturer's warranties.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: A manufacturer capable of fabricating aluminum windows that meet or exceed performance requirements indicated and of documenting this performance by test reports and calculations.
- B. Installer Qualifications: An installer acceptable to aluminum window manufacturer for installation of units required for this Project.

1.5 WARRANTY

- A. Manufacturer's Warranty: Manufacturer agrees to repair or replace aluminum windows that fail in materials or workmanship within specified warranty period.
 - 1. Failures include, but are not limited to, the following:

CRUISE SHIP BERTH SECURITY CHECKPOINTS CBJ Contract No. DH19-050

- a. Failure to meet performance requirements.
- b. Structural failures including excessive deflection, water leakage, condensation, and air infiltration.
- c. Faulty operation of movable sash and hardware.
- d. Deterioration of materials and finishes beyond normal weathering.
- e. Failure of insulating glass.

2. Warranty Period:

- a. Window: 10 years from date of Substantial Completion.
- b. Glazing Units: 10 years from date of Substantial Completion.
- c. Aluminum Finish: 20 years from date of Substantial Completion.

PART 2 - PRODUCTS

- 2.1 MANUFACTURERS
 - A. Source Limitations: Obtain aluminum windows from single source from single manufacturer.

2.2 WINDOW PERFORMANCE REQUIREMENTS

- A. Product Standard: Comply with AAMA/WDMA/CSA 101/I.S.2/A440 for definitions and minimum standards of performance, materials, components, accessories, and fabrication unless more stringent requirements are indicated.
 - 1. Window Certification: AAMA certified with label attached to each window.
- B. Performance Class and Grade: AAMA/WDMA/CSA 101/I.S.2/A440 as follows:
 - 1. Minimum Performance Class: CW.
 - 2. Minimum Performance Grade: 70 psf.
- C. Solar Heat-Gain Coefficient (SHGC): NFRC 200 maximum whole-window SHGC of 0.30.
- D. Thermal Movements: Provide aluminum windows, including anchorage, that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of joint sealants, failure of connections, and other detrimental effects. Base engineering calculation on surface temperatures of materials due to both solar heat gain and nighttime-sky heat loss.
 - 1. Temperature Change: 120 deg F ambient; 180 deg F material surfaces.

2.3 ALUMINUM WINDOWS

- A. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
 - 1. All Seasons Window & Door
 - 2. Arcadia, Inc.

- 3. Boyd Aluminum Manufacturing
- 4. Custom Window Company
- 5. DeSCo Windows
- 6. EFCO Corporation
- 7. Fleetwood Windows & Doors
- 8. Gerkin Windows and Doors
- 9. Graham Architectural Products
- 10. J. Sussman, Inc.
- 11. Kawneer North America
- 12. Manko Window Systems, Inc.
- 13. Mannix
- 14. Peerless Products, Inc.
- 15. Quaker Window Products
- 16. Thermal Windows, Inc.
- 17. TRACO
- 18. Wausau Window and Wall Systems
- 19. Winco Manufacturing Co.
- 20. YKK AP America, Inc.
- B. Types: Provide the following types in locations indicated on Drawings:
 - 1. Fixed.
- C. Frames: Aluminum extrusions complying with AAMA/WDMA/CSA 101/I.S.2/A440.
 - 1. Thermally Improved Construction: Fabricate frames, and muntins with an integral, concealed, low-conductance thermal barrier located between exterior materials and window members exposed on interior side in a manner that eliminates direct metal-to-metal contact.
- D. Laminated Glass: ASTM C1172 with two plies of float glass.
 - 1. Float Glass: Annealed, as required by performance requirements indicated.
 - 2. Inner Ply: Clear.
 - 3. Interlayer: 0.090 inch or as required by performance requirements indicated.
 - 4. Outer Ply: Clear.
- E. Glazing System: Manufacturer's standard factory-glazing system that produces weathertight seal.
- F. Hardware, General: Provide manufacturer's standard hardware fabricated from aluminum, stainless steel, carbon steel complying with AAMA 907, or other corrosion-resistant material compatible with adjacent materials; designed to smoothly operate, tightly close, and securely lock windows, and sized to accommodate sash weight and dimensions.
- G. Fasteners: Noncorrosive and compatible with window members, trim, hardware, anchors, and other components.
 - 1. Exposed Fasteners: Do not use exposed fasteners to greatest extent possible. For application of hardware, use fasteners that match finish hardware being fastened.

2.4 ACCESSORIES

- A. Integral Ventilating System/Device: Where indicated, provide weather-stripped, adjustable, horizontal fresh-air vent, with a free airflow slot, full width of window sash by approximately 1 inch when open, complying with AAMA/WDMA/CSA 101/I.S.2/A440. Equip vent bar with an integral insect screen, removable for cleaning.
- B. Subsills: Nonthermal, extruded-aluminum subsills in configurations indicated on Drawings.
- C. Interior Trim: Extruded-aluminum profiles in sizes and configurations indicated on Drawings.
- D. Panning Trim: Extruded-aluminum profiles in sizes and configurations indicated on Drawings.
- E. Receptor System: Two-piece, snap-together, thermally broken, extruded-aluminum receptor system that anchors windows in place.

2.5 FABRICATION

- A. Fabricate aluminum windows in sizes indicated. Include a complete system for assembling components and anchoring windows.
- B. Glaze aluminum windows in the factory.
- C. Weep Holes: Provide weep holes and internal passages to conduct infiltrating water to exterior.
- D. Provide water-shed members above side-hinged sashes and similar lines of natural water penetration.
- E. Mullions: Provide mullions and cover plates, matching window units, complete with anchors for support to structure and installation of window units. Allow for erection tolerances and provide for movement of window units due to thermal expansion and building deflections. Provide mullions and cover plates capable of withstanding design wind loads of window units.
- F. Window Assemblies: Provide fixed units in configuration indicated. Provide window frames, sashes, hardware, and other trim and components necessary for a complete, secure, and weathertight installation, including the following:
 - 1. Angled mullion posts with interior and exterior trim.
 - 2. Angled interior and exterior extension and trim.
 - 3. Exterior head and sill casings and trim.
- G. Complete fabrication, assembly, finishing, hardware application, and other work in the factory to greatest extent possible. Disassemble components only as necessary for shipment and installation.

2.6 GENERAL FINISH REQUIREMENTS

A. Comply with NAAMM's "Metal Finishes Manual" for recommendations for applying and designating finishes.

- B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.
- C. Appearance of Finished Work: Noticeable variations in same piece are not acceptable. Variations in appearance of adjoining components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

2.7 ALUMINUM FINISHES

- A. Finish designations prefixed by AA comply with the system established by the Aluminum Association for designating aluminum finishes.
- B. Class II, Clear Anodic Finish: AA-M12C22A31 (Mechanical Finish: nonspecular as fabricated; Chemical Finish: etched, medium matte; Anodic Coating: Architectural Class II, clear coating 0.010 mm or thicker) complying with AAMA 611.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine openings, substrates, structural support, anchorage, and conditions, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance of the Work.
- B. Verify rough opening dimensions, levelness of sill plate, and operational clearances.
- C. Examine wall flashings, vapor retarders, water and weather barriers, and other built-in components to ensure weathertight window installation.
- D. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

- A. Comply with manufacturer's written instructions for installing windows, hardware, accessories, and other components. For installation procedures and requirements not addressed in manufacturer's written instructions, comply with installation requirements in ASTM E2112.
- B. Install windows level, plumb, square, true to line, without distortion or impeding thermal movement, anchored securely in place to structural support, and in proper relation to wall flashing and other adjacent construction to produce weathertight construction.
- C. Install windows and components to drain condensation, water penetrating joints, and moisture migrating within windows to the exterior.
- D. Separate aluminum and other corrodible surfaces from sources of corrosion or electrolytic action at points of contact with other materials.

3.3 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to perform tests and inspections.

- 1. Testing and inspecting agency will interpret tests and state in each report whether tested work complies with or deviates from requirements.
- B. Testing Services: Testing and inspecting of installed windows shall take place as follows:
 - 1. Testing Methodology: Testing of windows for air infiltration and water resistance shall be performed according to AAMA 502.
 - 2. Air-Infiltration Testing:
 - a. Test Pressure: That required to determine compliance with AAMA/WDMA/CSA 101/I.S.2/A440 performance class indicated.
 - b. Allowable Air-Leakage Rate: 1.5 times the applicable AAMA/WDMA/CSA 101/I.S.2/A440 rate for product type and performance class rounded down to one decimal place.
 - 3. Water-Resistance Testing:
 - a. Test Pressure: Two-thirds times test pressure required to determine compliance with AAMA/WDMA/CSA 101/I.S.2/A440 performance grade indicated.
 - b. Allowable Water Infiltration: No water penetration.
 - 4. Test Reports: Prepared according to AAMA 502.
- C. Windows will be considered defective if they do not pass tests and inspections.
- D. Prepare test and inspection reports.

3.4 ADJUSTING, CLEANING, AND PROTECTION

- A. Adjust operating sashes and hardware for a tight fit at contact points and weather stripping for smooth operation and weathertight closure.
- B. Clean exposed surfaces immediately after installing windows. Avoid damaging protective coatings and finishes. Remove excess sealants, glazing materials, dirt, and other substances.
 - 1. Keep protective films and coverings in place until final cleaning.
- C. Remove and replace glass that has been broken, chipped, cracked, abraded, or damaged during construction period.
- D. Protect window surfaces from contact with contaminating substances resulting from construction operations. If contaminating substances do contact window surfaces, remove contaminants immediately according to manufacturer's written instructions.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Glass for windows and doors.
 - 2. Glazing sealants and accessories.

1.2 DEFINITIONS

- A. Glass Manufacturers: Firms that produce primary glass, fabricated glass, or both, as defined in referenced glazing publications.
- B. Glass Thicknesses: Indicated by thickness designations in millimeters according to ASTM C1036.
- C. IBC: International Building Code.

1.3 COORDINATION

A. Coordinate glazing channel dimensions to provide necessary bite on glass, minimum edge and face clearances, and adequate sealant thicknesses, with reasonable tolerances.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Glazing Schedule: List glass types and thicknesses for each size opening and location. Use same designations indicated on Drawings.
- C. Delegated-Design Submittal: For glass indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.5 INFORMATIONAL SUBMITTALS

- A. Product Certificates: For glass.
- B. Product Test Reports: For glass glazing sealants, for tests performed by a qualified testing agency.
 - 1. For glazing sealants, provide test reports based on testing current sealant formulations within previous 36-month period.

C. Sample Warranties: For special warranties.

1.6 QUALITY ASSURANCE

A. Installer Qualifications: A qualified installer who employs glass installers for this Project who are certified under the National Glass Association's Certified Glass Installer Program.

1.7 PRECONSTRUCTION TESTING

- A. Preconstruction Adhesion and Compatibility Testing: Test each glass product, tape sealant, gasket, glazing accessory, and glass-framing member for adhesion to and compatibility with elastomeric glazing sealants.
 - 1. Testing is not required if data are submitted based on previous testing of current sealant products and glazing materials matching those submitted.
 - 2. Use ASTM C1087 to determine whether priming and other specific joint-preparation techniques are required to obtain rapid, optimum adhesion of glazing sealants to glass, tape sealants, gaskets, and glazing channel substrates.
 - 3. Test no fewer than eight Samples of each type of material, including joint substrates, shims, sealant backings, secondary seals, and miscellaneous materials.
 - 4. Schedule enough time for testing and analyzing results to prevent delaying the Work.
 - 5. For materials failing tests, submit sealant manufacturer's written instructions for corrective measures including the use of specially formulated primers.

1.8 DELIVERY, STORAGE, AND HANDLING

A. Protect glazing materials according to manufacturer's written instructions. Prevent damage to glass and glazing materials from condensation, temperature changes, direct exposure to sun, or other causes.

1.9 FIELD CONDITIONS

- A. Environmental Limitations: Do not proceed with glazing when ambient and substrate temperature conditions are outside limits permitted by glazing material manufacturers and when glazing channel substrates are wet from rain, frost, condensation, or other causes.
 - 1. Do not install glazing sealants when ambient and substrate temperature conditions are outside limits permitted by sealant manufacturer or are below 40 deg F.

1.10 WARRANTY

A. Manufacturer's Special Warranty for Laminated Glass: Manufacturer agrees to replace laminated-glass units that deteriorate within specified warranty period. Deterioration of laminated glass is defined as defects developed from normal use that are not attributed to glass breakage or to maintaining and cleaning laminated glass contrary to manufacturer's written instructions. Defects include edge separation, delamination materially obstructing vision through glass, and blemishes exceeding those allowed by referenced laminated-glass standard.

1. Warranty Period: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. <u>Manufacturers:</u> Subject to compliance with requirements, provide products by one of the following:
 - 1. AGC Glass Company North America, Inc.
 - 2. <u>Cardinal Glass Industries</u>.
 - 3. <u>Cristacurva</u>.
 - 4. <u>Dlubak Corporation</u>.
 - 5. <u>Gardner Glass, Inc</u>.
 - 6. <u>GGI; General Glass International</u>.
 - 7. <u>Glasswerks LA, Inc</u>.
 - 8. <u>GTI; Glaz-Tech Industries</u>.
 - 9. <u>Guardian Glass; SunGuard</u>.
 - 10. <u>Hartung Glass Industries</u>.
 - 11. JE Berkowitz, LP.
 - 12. <u>Northwestern Industries, Inc</u>.
 - 13. <u>Oldcastle BuildingEnvelopeTM</u>.
 - 14. Pilkington North America.
 - 15. <u>Schott North America, Inc</u>.
 - 16. <u>Tecnoglass</u>.
 - 17. <u>Trulite Glass & Aluminum Solutions, LLC</u>.
 - 18. <u>Vetrotech Saint-Gobain</u>.
 - 19. <u>Viracon, Inc</u>.
- B. Source Limitations for Glass: Obtain from single source from single manufacturer for each glass type.
 - 1. Obtain tinted glass from single source from single manufacturer.
 - 2. Obtain reflective-coated glass from single source from single manufacturer.
- C. Source Limitations for Glazing Accessories: Obtain from single source from single manufacturer for each product and installation method.

2.2 PERFORMANCE REQUIREMENTS

- A. General: Installed glazing systems shall withstand normal thermal movement and wind without failure, including loss or glass breakage attributable to the following: defective manufacture, fabrication, or installation; failure of sealants or gaskets to remain watertight and airtight; deterioration of glazing materials; or other defects in construction.
- B. Delegated Design: Engage a qualified professional engineer, to design glazing.

- C. Structural Performance: Glazing shall withstand the following design loads within limits and under conditions indicated determined according to the IBC and ASTM E1300.
 - 1. Design Wind Pressures: Determine design wind pressures applicable to Project according to ASCE/SEI 7, based on heights above grade indicated on Drawings.
 - a. Wind Speed: 140 mph.
 - b. Importance Factor: 1.0.
 - c. Exposure Category: D.
 - 2. Maximum Lateral Deflection: For glass supported on all four edges, limit center-of-glass deflection at design wind pressure to not more than 1/50 times the short-side length or 1 inch, whichever is less.
- D. Thermal and Optical Performance Properties: Provide glass with performance properties specified, as indicated in manufacturer's published test data, based on procedures indicated below:
 - 1. For laminated-glass lites, properties are based on products of construction indicated.
 - 2. Visible Reflectance: Center-of-glazing values, according to NFRC 300.

2.3 GLASS PRODUCTS, GENERAL

- A. Glazing Publications: Comply with published recommendations of glass product manufacturers and organizations below unless more stringent requirements are indicated. See these publications for glazing terms not otherwise defined in this Section or in referenced standards.
 - 1. GANA Publications: "Laminated Glazing Reference Manual" and "Glazing Manual."
- B. Thickness: Where glass thickness is indicated, it is a minimum. Provide glass that complies with performance requirements and is not less than the thickness indicated.
- C. Strength: Where annealed float glass is indicated, provide annealed float glass, heatstrengthened float glass, or fully tempered float glass as needed to comply with "Performance Requirements" Article.

2.4 GLASS PRODUCTS

A. Clear Annealed Float Glass: ASTM C1036, Type I, Class 1 (clear), Quality-Q3.

2.5 LAMINATED GLASS

- A. Laminated Glass: ASTM C1172. Use materials that have a proven record of no tendency to bubble, discolor, or lose physical and mechanical properties after fabrication and installation.
 - 1. Construction: Laminate glass with polyvinyl butyral interlayer to comply with interlayer manufacturer's written instructions.
 - 2. Interlayer Thickness: Provide thickness not less than that indicated and as needed to comply with requirements.

3. Interlayer Color: Clear unless otherwise indicated.

2.6 GLAZING SEALANTS

- A. General:
 - 1. Compatibility: Compatible with one another and with other materials they contact, including glass products, seals of insulating-glass units, and glazing channel substrates, under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
 - 2. Suitability: Comply with sealant and glass manufacturers' written instructions for selecting glazing sealants suitable for applications indicated and for conditions existing at time of installation.
 - 3. Colors of Exposed Glazing Sealants: As indicated by manufacturer's designations.
- B. Glazing Sealant: Neutral-curing silicone glazing sealant complying with ASTM C920, Type S, Grade NS, Class 100/50, Use NT.

2.7 GLAZING TAPES

- A. Back-Bedding Mastic Glazing Tapes: Preformed, butyl-based, 100 percent solids elastomeric tape; nonstaining and nonmigrating in contact with nonporous surfaces; with or without spacer rod as recommended in writing by tape and glass manufacturers for application indicated; and complying with ASTM C1281 and AAMA 800 for products indicated below:
 - 1. AAMA 806.3 tape, for glazing applications in which tape is subject to continuous pressure.
 - 2. AAMA 807.3 tape, for glazing applications in which tape is not subject to continuous pressure.

2.8 MISCELLANEOUS GLAZING MATERIALS

- A. General: Provide products of material, size, and shape complying with referenced glazing standard, with requirements of manufacturers of glass and other glazing materials for application indicated, and with a proven record of compatibility with surfaces contacted in installation.
- B. Cleaners, Primers, and Sealers: Types recommended by sealant or gasket manufacturer.
- C. Setting Blocks:
 - 1. EPDM, Silicone or Neoprene with a Shore A durometer hardness of 85, plus or minus 5.
 - 2. Type recommended by sealant or glass manufacturer.
- D. Spacers:
 - 1. Neoprene blocks or continuous extrusions of hardness required by glass manufacturer to maintain glass lites in place for installation indicated.
 - 2. Type recommended by sealant or glass manufacturer.

E. Edge Blocks:

- 1. EPDM, Silicone or Neoprene with a Shore A durometer hardness per manufacturer's written instructions.
- 2. Type recommended by sealant or glass manufacturer.
- F. Cylindrical Glazing Sealant Backing: ASTM C1330, Type O (open-cell material), of size and density to control glazing sealant depth and otherwise produce optimum glazing sealant performance.

2.9 FABRICATION OF GLAZING UNITS

- A. Fabricate glazing units in sizes required to fit openings indicated for Project, with edge and face clearances, edge and surface conditions, and bite complying with written instructions of product manufacturer and referenced glazing publications, to comply with system performance requirements.
 - 1. Allow for thermal movements from ambient and surface temperature changes acting on glass framing members and glazing components.
 - a. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.
- B. Clean-cut or flat-grind vertical edges of butt-glazed monolithic lites to produce square edges with slight chamfers at junctions of edges and faces.
- C. Grind smooth and polish exposed glass edges and corners.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine framing, glazing channels, and stops, with Installer present, for compliance with the following:
 - 1. Manufacturing and installation tolerances, including those for size, squareness, and offsets at corners.
 - 2. Presence and functioning of weep systems.
 - 3. Minimum required face and edge clearances.
 - 4. Effective sealing between joints of glass-framing members.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Clean glazing channels and other framing members receiving glass immediately before glazing. Remove coatings not firmly bonded to substrates.

B. Examine glazing units to locate exterior and interior surfaces. Label or mark units as needed so that exterior and interior surfaces are readily identifiable. Do not use materials that leave visible marks in the completed Work.

3.3 GLAZING, GENERAL

- A. Comply with combined written instructions of manufacturers of glass, sealants, gaskets, and other glazing materials, unless more stringent requirements are indicated, including those in referenced glazing publications.
- B. Protect glass edges from damage during handling and installation. Remove damaged glass from Project site and legally dispose of off Project site. Damaged glass includes glass with edge damage or other imperfections that, when installed, could weaken glass, impair performance, or impair appearance.
- C. Apply primers to joint surfaces where required for adhesion of sealants, as determined by preconstruction testing.
- D. Install setting blocks in sill rabbets, sized and located to comply with referenced glazing publications, unless otherwise required by glass manufacturer. Set blocks in thin course of compatible sealant suitable for heel bead.
- E. Do not exceed edge pressures stipulated by glass manufacturers for installing glass lites.
- F. Provide spacers for glass lites where length plus width is larger than 50 inches.
 - 1. Locate spacers directly opposite each other on both inside and outside faces of glass. Install correct size and spacing to preserve required face clearances, unless gaskets and glazing tapes are used that have demonstrated ability to maintain required face clearances and to comply with system performance requirements.
 - 2. Provide 1/8-inch minimum bite of spacers on glass and use thickness equal to sealant width. With glazing tape, use thickness slightly less than final compressed thickness of tape.
- G. Provide edge blocking where indicated or needed to prevent glass lites from moving sideways in glazing channel, as recommended in writing by glass manufacturer and according to requirements in referenced glazing publications.
- H. Set glass lites in each series with uniform pattern, draw, bow, and similar characteristics.
- I. Set glass lites with proper orientation so that coatings face exterior or interior as specified.
- J. Where wedge-shaped gaskets are driven into one side of channel to pressurize sealant or gasket on opposite side, provide adequate anchorage so gasket cannot walk out when installation is subjected to movement.
- K. Square cut wedge-shaped gaskets at corners and install gaskets in a manner recommended by gasket manufacturer to prevent corners from pulling away; seal corner joints and butt joints with sealant recommended by gasket manufacturer.

3.4 TAPE GLAZING

- A. Position tapes on fixed stops so that, when compressed by glass, their exposed edges are flush with or protrude slightly above sightline of stops.
- B. Install tapes continuously, but not necessarily in one continuous length. Do not stretch tapes to make them fit opening.
- C. Cover vertical framing joints by applying tapes to heads and sills first, then to jambs. Cover horizontal framing joints by applying tapes to jambs, then to heads and sills.
- D. Place joints in tapes at corners of opening with adjoining lengths butted together, not lapped. Seal joints in tapes with compatible sealant approved by tape manufacturer.
- E. Do not remove release paper from tape until right before each glazing unit is installed.
- F. Apply heel bead of elastomeric sealant.
- G. Center glass lites in openings on setting blocks, and press firmly against tape by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings.
- H. Apply cap bead of elastomeric sealant over exposed edge of tape.

3.5 GASKET GLAZING (DRY)

- A. Cut compression gaskets to lengths recommended by gasket manufacturer to fit openings exactly, with allowance for stretch during installation.
- B. Insert soft compression gasket between glass and frame or fixed stop so it is securely in place with joints miter cut and bonded together at corners.
- C. Installation with Drive-in Wedge Gaskets: Center glass lites in openings on setting blocks, and press firmly against soft compression gasket by inserting dense compression gaskets formed and installed to lock in place against faces of removable stops. Start gasket applications at corners and work toward centers of openings. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
- D. Installation with Pressure-Glazing Stops: Center glass lites in openings on setting blocks, and press firmly against soft compression gasket. Install dense compression gaskets and pressure-glazing stops, applying pressure uniformly to compression gaskets. Compress gaskets to produce a weathertight seal without developing bending stresses in glass. Seal gasket joints with sealant recommended by gasket manufacturer.
- E. Install gaskets so they protrude past face of glazing stops.

3.6 SEALANT GLAZING (WET)

- A. Install continuous spacers, or spacers combined with cylindrical sealant backing, between glass lites and glazing stops to maintain glass face clearances and to prevent sealant from extruding into glass channel and blocking weep systems until sealants cure. Secure spacers or spacers and backings in place and in position to control depth of installed sealant relative to edge clearance for optimum sealant performance.
- B. Force sealants into glazing channels to eliminate voids and to ensure complete wetting or bond of sealant to glass and channel surfaces.
- C. Tool exposed surfaces of sealants to provide a substantial wash away from glass.

3.7 CLEANING AND PROTECTION

- A. Immediately after installation remove nonpermanent labels and clean surfaces.
- B. Protect glass from contact with contaminating substances resulting from construction operations. Examine glass surfaces adjacent to or below exterior concrete and other masonry surfaces at frequent intervals during construction, but not less than once a month, for buildup of dirt, scum, alkaline deposits, or stains.
 - 1. If, despite such protection, contaminating substances do come into contact with glass, remove substances immediately as recommended in writing by glass manufacturer. Remove and replace glass that cannot be cleaned without damage to coatings.
- C. Remove and replace glass that is damaged during construction period.
- D. Wash glass on both exposed surfaces not more than four days before date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended in writing by glass manufacturer.

3.8 LAMINATED GLASS SCHEDULE

- A. Clear laminated glass with two plies of annealed float glass.
 - 1. Minimum Thickness of Each Glass Ply: 3 mm.
 - 2. Interlayer Thickness: 0.030 inch.
 - 3. Safety glazing required.

END OF SECTION