CENTENNIAL HALL FLOOR RENOVATION

Contract No. BE17-156

File No. 1935



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SECTION 00030 - NOTICE INVITING BIDS

OBTAINING CONTRACT DOCUMENTS. The Contract Documents are entitled:

Centennial Hall Floor Renovation CBJ Contract No. BE17-156

The Contract Documents may be obtained at the City & Borough of Juneau (CBJ) Engineering Department, 3rd Floor Marine View Center, upon payment of \$25 (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 November 10, 2016, 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 Contract Specialist in the CBJ Engineering Contracts Division, at (907) 586-0490, or Contracts@juneau.org by 4:30 p.m., November 9, 2016.

DESCRIPTION OF WORK. This Project consists of removal of existing wood flooring and lower portion of gypsum board at walls; preparation of existing concrete slab including shot blasting and mechanical scarifying; installation of new thin cementitious overlayment and finish system; and installation of new blocking, gypsum board, wall finishes, and plastic base and miscellaneous related work.

DEADLINE FOR BIDDER QUESTIONS: Close of business on November 14, 2016.

DEADLINE FOR BIDS: Sealed bids must be received by the Purchasing Division **prior to 2:00 p.m., Alaska Time on November 18, 2016,** or such later time as may be announced by addendum at any time prior to the deadline. Bids will be time and date stamped by the Purchasing Division, which will establish the official time of receipt of bids. Bids will be opened immediately thereafter in the Assembly Chambers of the Municipal Building, 155 S. Seward Street, unless otherwise specified.

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

PHYSICAL LOCATION:

City and Borough of Juneau, Purchasing Division 105 Municipal Way, Room 300 Juneau, AK 99801 Bid documents delivered by the <u>U.S. Postal</u> **Service** must be mailed to:

MAILING ADDRESS:

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

SECTION 00030 - NOTICE INVITING BIDS

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

T NOTICE TO BIDDER				
our Bid:				
or company name and address on the upper elope.	left corner of			
•	t corner			
envelope.				
BID NUMBER:				
BE17-156	В			
	I			
SUBJECT:	D			
Centennial Hall Floor Renovation				
DEADLINE DATE:				
PRIOR TO 2:00PM ALASKA TIME				
	our Bid: or company name and address on the upper elope. te this label and place it on the lower left envelope. BID NUMBER: BE17-156 SUBJECT: Centennial Hall Floor Renovation DEADLINE DATE:			

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 Centennial Hall Convention Center, 101 Egan Drive, 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

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 60 Days from the date of Bid opening. Any component of the Bid including Deductive Alternates may be awarded anytime during the 60 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.

SECTION 00030 - NOTICE INVITING BIDS

OWNER: City and Borough of Juneau

Gree Smith Contract Administrator

10 27 2016 Date

2.

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.
- **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 a complete Subcontractor Report as required in section Section 00360 Subcontractor Report.

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

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

- 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, and that the Contract Documents are sufficient in scope and detail to indicate and convey understanding of all terms and conditions for performance of the WORK.

8.0 BID FORM.

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

- 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. Oral, telegraphic, emailed, or faxed Bids will not be considered. The envelope enclosing the sealed Bids shall be plainly marked in the upper left-hand corner with the name and address of the Bidder and shall also include the label included in Section 00030 Notice Inviting Bids. The Bid Security shall be enclosed in the same envelope with the Bid
- 12.0 BID SECURITY, BONDS, AND INSURANCE. Each Bid shall be accompanied by a certified, or cashier's check, or approved Bid Bond in an amount of at least 5 percent of the total Bid price. The "total Bid price" is the amount of the Base Bid, plus the amount of alternate Bids, if any, which total to the maximum amount for which the CONTRACT could be awarded. Said check or Bond shall be made payable to the OWNER and shall be given as a guarantee that the Bidder, if offered the WORK, will enter into an Agreement with the OWNER, and will furnish the necessary insurance certificates, Payment Bond, and Performance Bond; each of said Bonds, if required, and insurance amounts shall be as stated in the Supplementary General Conditions. In case of refusal or failure to enter into said Agreement, the check or Bid Bond, as the case may be, may be forfeited to the OWNER. If the Bidder elects to furnish a Bid Bond as its Bid security, the Bidder shall use the Bid Bond form bound herein, or one conforming substantially to it in form. Bid Bonds must be accompanied by a legible Power of Attorney.

- **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 render it unauthorized and cause its rejection as being non-responsive</u>. 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.
- C. Low Bidder will be determined on the basis of the lowest total of the Base Bid plus combinations of Alternates if funding allows, as selected by the Selection Committee through the process described below.
 - Prior to the Deadline for Bids, a Selection Committee will be appointed by the Owner.
 - 2 The Selection Committee will be sequestered in a conference room apart from the bid opening room at the time of bid opening.
 - The CBJ Purchasing staff will open bids. A bid summary sheet will be compiled without bidder identification, so that the Selection Committee will have no knowledge of which bids were made by which bidders.
 - The bid summary sheet will be delivered to the Selection Committee by the Engineering Contract Administrator.
 - The Selection Committee will choose the low bid comprised of the Base Bid and those Alternates deemed to be in the best interest of the project and within the approved construction budget. For award purposes, the CBJ will add any Alternate to the Total Base Bid Amount in Section 00310 Bid Schedule.
 - The Selection Committee will identify in order from low to high the bids received for the project and the results will be posted.

18.0 EXECUTION OF AGREEMENT.

A. All Bids of value greater than \$1,000,000 must be approved by the CBJ Assembly. After the CBJ Assembly has approved the award and after the Bid protest period, the OWNER will issue a Notice of Intent to Award to the approved Bidder. The Bidder to whom award is made shall execute a written Agreement with the OWNER on the Agreement form, Section 00500, collect insurance, and shall furnish all certificates and Bonds required by the Contract Documents within 10 Days (calendar) from the date of the Notice of Intent to Award letter.

- B. Failure or refusal to enter into the Agreement as herein provided or to conform to any of the stipulated requirements in connection therewith shall be just cause for annulment of the award and forfeiture of the Bid security. If the lowest responsive, responsible Bidder refuses or fails to execute the Agreement, the OWNER may award the contract to the second lowest responsive, responsible Bidder. If the second lowest responsive, responsible Bidder refuses or fails to execute the Agreement, the OWNER may award the contract to the third lowest responsive, responsible Bidder. On the failure or refusal of such second or third lowest Bidder to execute the Agreement, each such Bidder's Bid securities shall be likewise forfeited to the OWNER.
- **19.0 LIQUIDATED DAMAGES**. Provisions for liquidated damages if any, are set forth in Section 00500 Agreement.

20.0 FILING A PROTEST.

- A. A Bidder may protest the proposed award of a competitive sealed Bid by the City and Borough of Juneau. The protest shall be executed in accordance with CBJ Ordinance 53.50.062 PROTESTS and CBJ Ordinance 53.50.080 ADMINISTRATION OF PROTEST. The entire text of the CBJ Purchasing Ordinance can be accessed at the CBJ website, http://www.juneau.org/law/code/code.php, or call the CBJ Purchasing Division at (907) 586-5258 for a copy of the ordinance.
- B. Late protests shall not be considered by the CBJ Purchasing Officer.
- 21.0 CONTRACTOR'S GOOD STANDING WITH CBJ FINANCE DEPARTMENT: Contractors must be in good standing with the CBJ prior to award, and prior to any contract renewals, and in any event no later than seven business days following notification by the CBJ of intent to award. Good standing means: all amounts owed to the CBJ are current and the Contractor is not delinquent with respect to any taxes, fees, assessment, or other monies due and owed the CBJ, or a Confession of Judgment has been executed and the Contractor is in compliance with the terms of any stipulation associated with the Confession of Judgment, including being current as to any installment payments due; and Contractor is current in all CBJ reporting obligations (such as sales tax registration and reporting and business personal property declarations). Failure to meet these requirements may be cause for rejection of your bid. To determine if your business is in good standing, or for further information, contact the CBJ Finance Department's Sales Tax Division at (907) 586-5265 for sales tax issues, Assessor's Office at (907)586-0930 for business personal property issues, or Collections Division at (907) 586-5268 for all other accounts.
- **22.0 PERMITS AND LICENSES.** The CONTRACTOR is responsible for all WORK associated with meeting any local, state, and/or federal permit and licensing requirements.

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

BID MODIFICATION FORM

Modificati forms sub	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	MODIFICATIO TO UNIT PRICE LUMP SUM (indicate +/-)		
Base Bid Total In	crease or Decrease: \$			
Base Bid Total In PAY ITEM No.	crease or Decrease: \$ DEDUCTIVE ALTERNATE No. 1 PAY ITEM DESCRIPTION (if applicable to project)	MODIFICATIO TO UNIT PRICE LUMP SUM (indicate +/-)		
PAY ITEM No.	DEDUCTIVE ALTERNATE No. 1 PAY ITEM DESCRIPTION	MODIFICATIO TO UNIT PRICE LUMP SUM		

PAY ITEM No.	DEDUCTIVE ALTERNATE No. 2 PAY ITEM DESCRIPTION (if applicable to project)	MODIFICATIONS TO UNIT PRICE OR LUMP SUM (indicate +/-)
Alternate No. 2 T	otal Increase or Decrease: \$	
PAY ITEM No.	DEDUCTIVE ALTERNATE No. 3 PAY ITEM DESCRIPTION (if applicable to project)	MODIFICATIONS TO UNIT PRICE OR LUMP SUM (indicate +/-)
Alternate No. 3 T	otal Increase or Decrease: \$	
	Name of Bidding Firm	
	Responsible Party Signature	

END OF SECTION

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

SECTION 00300 - BID

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

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- 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:	(Company Name)
Alaska CONTRACTOR's Business License No:	Ву:	(Signature)
Alaska	Printed Name:	
CONTRACTOR's License No:	Title:	
Telephone No:	Address:	
Fax No:		(Street or P.O. Box)
Email:		(City, State, Zip)

- 9. TO BE CONSIDERED, ALL BIDDERS MUST COMPLETE AND INCLUDE THE FOLLOWING AT THE TIME OF THE DEADLINE FOR BIDS:
 - ➤ Bid, Section 00300 (includes addenda receipt statement)
 - ➤ Completed Bid Schedule, Section 00310
 - ➤ Bid Security (Bid Bond, Section 00320, or by a certified or cashier's check as stipulated in the Notice Inviting Bids, Section 00030)
- 10. The apparent low Bidder is required to complete and submit the following documents by 4:30 p.m. on the *fifth business day* following the date of the Posting Notice.
 - Subcontractor Report, Section 00360

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

SECTION 00310 - BID SCHEDULE

Bid Schedule for construction of <u>BE17-156 Cen</u> Contract Documents.	tennial Hall Floor Renovation, in accordance with the
portion of gypsum board at walls; preparation of ex scarifying; installation of new thin cementitious	naterials for removal of existing wood flooring and lower tisting concrete slab including shot blasting and mechanical overlayment and finish system; and installation of new base and perform all WORK as described in these Contract
TOTAL BASE BID	\$
	(Price in Figures)
ADDITIVE ALTERNATE NO. 1 - Furnish all l grind and stain existing slab.	labor, equipment and materials and perform all WORK to
TOTAL ADDITIVE ALTERNATE NO. 1	\$
TOTAL ADDITIVE ALTERNATE NO. 1	(Price in Figures)
prepare and epoxy coat existing slab. TOTAL ADDITIVE ALTERNATE NO. 2	\$(Price in Figures)
	abor, equipment and materials and perform all WORK for vable control joint forming material and semi-rigid epoxy rol joint.
TOTAL ADDITIVE ALTERNATE NO. 3	\$
	(Price in Figures)
Date: Bidder:	(Company Name)
	(Company Pame)

SECTION 00320 - BID BOND

KNOW ALL PERSONS BY	THESE PRESENTS, ti	that
as Princ	cipal, and	
as Surety, are held and firmly bound u	nto THE CITY AND	BOROUGH OF JUNEAU hereinafter called
"OWNER," in the sum of		
	uly to be made, we bind	n five percent of the total amount of the Bid) for d ourselves, our heirs, executors, administrators e presents.
WHEREAS, said Principal has the Bid Schedule of the OWNER's Co		d OWNER to perform the WORK required under tled
Ce	entennial Hall Floor R CBJ Contract No. BF	
in the manner required in the "Notice Agreement on the form of Agreement to of insurance, and furnishes the require null and void, otherwise it shall remain	Inviting Bids" and the bound with said Contracted Performance Bond and in full force and effect said Surety shall pay also be fixed by the court.	
(SEAL)(Principal)		(SEAL)(Surety)
By:		Bv.
(Signature)		By:(Signature)

SECTION 00360 - SUBCONTRACTOR REPORT

LIST OF SUBCONTRACTORS (AS 36.30.115)

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

SUBCONTRACTOR	¹ AK Contractor <u>License No.</u>	¹ Contact Name	Type of	Contract	√ if
<u>ADDRESS</u>	² AK Business <u>License No.</u>	² Phone No.	Work	<u>Amount</u>	DBE
1	1			\$	
	2				
2	1			\$	
	2				
3	1			\$	
	2				
4	1			\$	
	2				
I certify that the above liste were valid at the time Bids			ΓOR Registrati	on(s), if applicab	le,
CONTRACTOR, Authorize	ed Signature	<u> </u>			
CONTRACTOR, Printed N	ame				
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.

THIS AGREEMENT is between

The total amount of this contract shall be _____

as adjusted in accordance with the provisions of the Contract Documents.

<u>)</u>, except

(\$

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 00030-3, inclusive).
- Instructions to Bidders (pages 00100-1 to 00100-10, inclusive).
- ➤ Bid (pages 00300-1 to 00300-2, inclusive).
- ➤ Bid Schedule (pages 00310-1, inclusive).
- ➤ Bid Bond (page 00320-1, inclusive) or Bid Security.
- Subcontractor Report (pages 00360-1 to 00360-2, inclusive).
- Performance Bond (pages 00610-1 to 00610-2, inclusive).
- Payment Bond (pages 00620-1 to 00620-2, inclusive).
- ➤ Insurance Certificate(s).
- ➤ General Conditions (pages 00700-1 to 00700-44, 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.
- \triangleright Drawings consisting of $\underline{2}$ sheets, as listed in the Table of Contents.
- Addenda numbers ______ to _____, inclusive.
- Change Orders which may be delivered or issued after the Date of the Agreement and which are not attached hereto.

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

ARTICLE 8. MISCELLANEOUS.

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

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

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

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: <u>Duncan Rorie Watt, City & Borough Manager</u> (Printed Name)	By:(Printed Name, Authority or Title)
Date:	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 COUNTY OF)) SS:)				
I HEREBY CE	ERTIFY that a meeting of	the Board of Dir	rectors of t	he	
		a cor	poration e	xisting under the laws of	
the State of was duly passed and ad	, held on		, 20	, the following resolution	n
BOROUGH O Secretary of the of this Corpora I further certify	F JUNEAU and this corp e Corporation, and with the	oration and that the Corporate Sea	the execution of the control of the	, asPresi eement with the CITY AN ion thereof, attested by the shall be the official act and d the official seal of the	
corporation this	day of	, 20			
		Seci	retary		
(SEAL)					

CERTIFICATE (if Partnership)

STAT	OF)) SS:	
COUN		
	HEREBY CERTIFY that a meeting of the Partners of the	
	a partnership existing under the laws of the State	
	, held on, 20, the following resolution was duly nd adopted:	
	'RESOLVED, that, as of the Partnership, be and increeby 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."	ıd
	further certify that said resolution is now in full force and effect.	
20	IN WITNESS WHEREOF, I have hereunto set my hand this, day of,	
	Secreta	ıry
(SEAI		

CERTIFICATE (if Joint Venture)

STATE	OF)		
COUNT	Y OF) SS:)		
]	I HEREBY	CERTIFY that a	meeting of the Principals of the	
			a joint venture existing ur	nder the laws of the
State of adopted:		, held on	, 20, the following resolution	was duly passed and
] - :	BOROUGI	H OF JUNEAU at strify that said reso	by authorized to execute the Agreement wind this joint venture and that the execution the shall be the official act and deed of this Join plution is now in full force and effect. I have hereunto set my hand this, da	hereof, attested by the int Venture."
				Secretary
(SEAL)				

SECTION 00610 - PERFORMANCE BOND

	KNOW ALL PERSONS I	BY THESE PRESENT:	S: That we	
			(Name of CONTRAC	TOR)
a				
		(Corporation, Part	nership, Individual)	
hereina	after called "Principal" and _			
	_	(S	urety)	
of	, State of	herein	nafter called the "Surety", are held a	and firmly bound
to the	CITY AND BOROUGH of (Owner)`		hereinafter called "OWNER", fo	or the penal sum
of	,	` •	dollars (\$) in
	money of the United States,	for the payment of which	ch sum well and truly to be made, we and severally, firmly by these pres	e bind ourselves,
certain	contract with the OWNER,	the effective date of w	ch that whereas, the CONTRACTO hich is (CBJ Contracts Office to find and made a part hereof for the co	ll in effective date

Centennial Hall Floor Renovation CBJ Contract No. BE17-156

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

Centennial Hall Floor Renovation CBJ Contract No. BE17-156

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

CONTRACTOR:	
By:	
By:(Signature)	
(Printed Name)	
(x mico i (unio)	
(Company Name)	
(Mailing Address)	
(City, State, Zip Code)	
SURETY:	
By:	Date Issued:
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, all Partners must execute bond.

SECTION 00620 - PAYMENT BOND

WHOM ALL DEDGONG DATELIEGE DDEGENTED. THE

KNOW AL	L PERSONS BY THESE PR	ESENTS: That we
		(Name of CONTRACTOR)
	a	
		(Corporation, Partnership, Individual)
hereinafter called "P	rincipal" and	
	_	(Surety)
of	, State of	hereinafter called the "Surety," are held and
firmly bound to the	CITY AND BOROUGH of J (Owner) (City	UNEAU, ALASKA hereinafter called "OWNER," for the y and State)
penal sum of		Dollars
(\$) in lawful mone	ey of the United States, for the payment of which sum well
and truly to be mad severally, firmly by		eirs, executors, administrators and successors, jointly and
THE COND	DITION OF THIS OBLIGATI	ION is such that Whereas, the CONTRACTOR has entered
	•	tive date of which is (CBJ Contracts Office to fill in effective
	, a copy of v	which is hereto attached and made a part hereof for the
construction of:		

Centennial Hall Floor Renovation CBJ Contract No. BE17-156

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

Centennial Hall Floor Renovation CBJ Contract No. BE17-156

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

CONTRACTOR:		
Bv:		
By:(Signature)	-	
(Printed Name)	_	
(Company Name)	_	
(Mailing Address)	-	
(City, State, Zip Code)	_	
SURETY:		
By:(Signature of Attorney-in-Fact)	Date Issued:	
(Signature of Attorney-in-Fact)		
(Printed Name)	_	
(Company Name)	_	
(Mailing Address)	_	
(City, State, Zip Code)	-	
(Affix SURETY'S SEAL)		

If CONTRACTOR is Partnership, all Partners must execute bond.

CENTENNIAL HALL FLOOR RENOVATION CBJ Contract No. BE17-156

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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

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:
 - 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;
 - 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.
- 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 Paragraph 11.5 EXCLUDED COSTS.
 - B. Labor. The costs of labor will be the actual cost for wages prevailing for each craft or type of workers performing the extra WORK at the time the extra WORK is done, plus employer payments of payroll taxes, worker's compensation insurance, liability insurance, health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. Labor costs for equipment operators and helpers shall be paid only when such costs are not included in the invoice for equipment rental. The labor costs for forepersons shall be proportioned to all of their assigned WORK and only that applicable to extra WORK shall be paid. Non-direct labor costs including superintendence shall be considered part of the mark-up set out in paragraph 11.4.
 - C. Materials. The cost of materials reported shall be at invoice or lowest current price at which materials are locally available and delivered to the job in the quantities involved, plus the cost of freight, delivery and storage, subject to the following:

- 1. Trade discounts available to the purchaser shall be credited to the OWNER notwithstanding the fact that such discounts may not have been taken by the CONTRACTOR.
- 2. For materials secured by other than a direct purchase and direct billing to the purchaser, the cost shall be deemed to be the price paid to the actual supplier as determined by the 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 http://www.equipmentwatch.com/rrbb.htm 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:
 - 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.
 - 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	15 percent
Materials	10 percent
Equipment	10 percent

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 (orequal) 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, testing, and reconstruction; and, if the parties are unable to agree as to the amount or extent thereof, the CONTRACTOR may make a claim therefor as provided in Articles 11 and 12.
- 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 signed by the ARCHITECT and CONTRACTOR, which shall fix the date of Substantial Completion.
- 14.8 FINAL APPLICATION FOR PAYMENT. After the CONTRACTOR has completed all of the remaining WORK items referred to in Paragraph 14.7 and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection, record as-built documents (as provided in the General Requirements) and other documents, all as required by the Contract Documents, and after the 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.

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

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

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

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

The CONTRACTOR shall purchase and maintain the following insurance:

1. Workers' Compensation and Employer's Liability. This insurance shall protect the CONTRACTOR against all claims under applicable state workers' compensation laws. The CONTRACTOR shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a Workers' Compensation law. The CONTRACTOR shall require each Subcontractor similarly to provide Workers' Compensation Insurance for all of the latter's employees to be engaged in such work unless such employees are covered by the protection afforded by the CONTRACTOR's Workers' Compensation Insurance. In case any class of employees is not protected, under the Workers' Compensation Statute, the CONTRACTOR shall provide and shall cause each subcontractor to provide adequate employer's liability insurance for the protection of such of its employees as are not otherwise protected.

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:\$100,000.00Each AccidentBodily Injury by Disease:\$100,000.00Each EmployeeBodily Injury by Disease:\$500,000.00Policy 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):
- 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

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. BUILDERS RISK is not required for this project.
- D. All Subcontractors are required to secure and maintain the insurance coverages listed above, unless otherwise noted.
- E. 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.
- F. Policies shall also specify insurance provided by CONTRACTOR will be considered primary and not contributory to any other insurance available to the OWNER.
- G. Should any of the policies described above be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

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

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

SGC 6.5 CONCERNING SUBCONTRACTORS, SUPPLIERS, AND OTHERS, Add the following 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. Building Permit will be obtained by Owner.
- E. Contractor is responsible for obtaining a Hot Works permit from the CBJ Permit Center, if performing work which requires such a permit. Work requiring a Hot Works Permit includes but is not limited to the following: cutting, welding, Thermit welding, brazing, soldering, grinding, thermal spraying, thawing pipe, installation of torch-applied roof systems or any other similar activity.

SGC 14.3 APPLICATION FOR PROGRESS PAYMENT. Paragraph D.

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

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

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

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

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

Add the following SGC 17:

SGC 17 GENERAL INFORMATION. This Project is currently funded by the City and Borough of Juneau, Alaska Sales Tax.

Employment Security Tax Clearance

Date:		
То:	Alaska Department of Labor Juneau Field Tax Office PH 907-465-2787 FAX 907-465-2374	
From:		
Subject:	Centennial Hall Floor Renovation Contract No. BE17-156	
Timeframe of	of Contract	
	e whether or not clearance is granted for the foll ne CONTRACTOR or Subcontractor per page.)	owing CONTRACTOR or Subcontractor:
Name	Address	
clearance an	0.265 of the Alaska Employment Security Act, to declare to make final payment for WORK performs 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

CENTENNIAL HALL FLOOR RENOVATION CBJ Contract No. BE17-156 ALASKA LABOR STANDARDS, REPORTING AND PREVAILING WAGE RATE DETERMINATION Page 00830-1

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Project information.
 - 2. Work covered by Contract Documents.
 - 3. Access to site.
 - 4. Coordination with occupants.
 - 5. Work restrictions.
 - 6. Specification and drawing conventions.
- B. Related Requirements:
 - 1. Section 015000 "Temporary Facilities and Controls" for limitations and procedures governing temporary use of Owner's facilities.

1.3 PROJECT INFORMATION

- A. Project Identification: Centennial Hall Floor Repair and Replacement
 - 1. Project Location: Juneau, Alaska
- B. Owner: City and Borough of Juneau, Alaska
 - 1. Owner's Representative: Rich Ritter, AIA; City and Borough of Juneau
- C. Architect: Dave Hurley, AIA; NorthWind Architects

1.4 WORK COVERED BY CONTRACT DOCUMENTS

A. The Work of Project is defined by the Contract Documents and is described in terms of two Base Bid Options, three Deductive Alternates and a scope of work related to repair of the existing concrete slab on grade which shall be addressed as a Unit Price Allowance. Each Option, Alternate and Allowance shall be assigned separate Bid Sums on the Bid Form. The scope of the project includes a mandatory pre-mobilization coordination meeting between the Owner, Architect, Contractor, Applicator and Technical Representatives for each principal product proposed for use in the project to ensure a fully integrated floor renovation system per Section 013000, AND Mock-Ups as described in Sections 033600, 035416.1 and 097420. The scope of work also includes but is not limited to:

- 1. Project work area: Approximately 12,200 SF
- 2. Base Bid:
 - a. Selective demolition:
 - 1) Existing wood floor system to expose existing slab on grade
 - 2) Lower 24" of existing gypsum wall board for full perimeter of work area
 - b. Existing slab on grade floor preparation:
 - 1) Mechanical scarifying and shot/abrasive blasting or grinding depending on Option or Alternate selected by Owner.
 - c. New flooring:
 - 1) Provide individual costs as separate bid items for Owner evaluation and selection:
 - a) Option 1: Hydraulic Cement Overlay, polished, with acid stain and urethane top coat.

OR

- b) Option 2: Hydraulic Cement Overlay (underlay), with two coat colored epoxy system and urethane top coat.
- d. New base:
 - 1) Installation of continuous blocking and new impact resistant gypsum wall board.
 - 2) Installation of new 3/4" x 8" custom HDPE plastic base.
- 3. Allowances: See Section 012100 "Allowances".
- 4. Deductive Alternates: See Section 012300 "Alternates".
- B. Type of Contract:
 - 1. Project will be constructed under a single prime contract.

1.5 ACCESS TO SITE

- A. General: Contractor shall have limited use of Project site for construction operations as indicated on Drawings by the Contract limits and as indicated by requirements of this Section.
- B. Use of Site: Limit use of Project site to areas within the Contract limits and staging and load-in areas indicated on the plans. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Driveways, Walkways and Entrances: Keep driveways parking areas, grounds and entrances serving premises clear and available to Owner, Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials.
 - a. Schedule deliveries to minimize use of driveways and entrances by construction operations.
 - b. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on-site.

C. Condition of Existing Building: Maintain portions of existing building affected by construction operations in as-is condition throughout construction period. Repair damage caused by construction operations.

1.6 COORDINATION WITH OCCUPANTS

- A. Full Owner Occupancy: Owner will occupy areas of the facility adjacent to the work area during the entire construction period. Cooperate with Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with Owner's day-to-day operations. Maintain existing exits unless otherwise indicated.
 - 1. Maintain access to existing walkways, corridors, and other adjacent occupied or used facilities. Do not close or obstruct walkways, corridors, or other occupied or used facilities without written permission from Owner.
 - 2. Notify Owner not less than 72 hours in advance of activities that will affect Owner's operations.

1.7 WORK RESTRICTIONS

- A. Work Restrictions, General: Comply with restrictions on construction operations.
- B. On-Site Work Hours: Limit work in the existing building to working hours of 7:00 a.m. to 7:00 p.m., Monday through Friday, unless otherwise indicated.
 - 1. Weekend Hours: Coordinate with Owner.
 - 2. Early Morning Hours: Coordinate with Owner.
 - 3. Hours for Utility Shutdowns: If required, coordinate with Owner. Make request of Owner no less than 24 hours in advance of proposed shutdown.
- C. Noise, Vibration, and Odors: Coordinate operations that may result in high levels of noise and vibration, odors, or other disruption to Owner occupancy with Owner.
 - 1. Notify Owner not less than 48 hours in advance of proposed disruptive operations.
- D. Controlled Substances: Use of tobacco products and other controlled substances within the existing building and on Project site is not permitted.

1.8 SPECIFICATION AND DRAWING CONVENTIONS

- A. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words, and phrases when used in particular situations. These conventions are as follows:
 - 1. Imperative mood and streamlined language are generally used in the Specifications. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.
 - 2. Specification requirements are to be performed by Contractor unless specifically stated otherwise.

- B. Division 01 General Requirements: Requirements of Sections in Division 01 apply to the Work of all Sections in the Specifications.
- C. Drawing Coordination: Requirements for materials and products identified on Drawings are described in detail in the Specifications. One or more of the following are used on Drawings to identify materials and products:
 - 1. Terminology: Materials and products are identified by the typical generic terms used in the individual Specifications Sections.
 - 2. Abbreviations: Materials and products are identified by abbreviations.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION (Not Used)

SECTION 012000 - PRICE AND PAYMENT PROCEDURES

PART 1 - GENERAL

1.1 CONTRACT MODIFICATION PROCEDURES

- A. On Owner's approval of a proposal from Contractor on AIA Document G709 (or other approved form), the CBJ Project Manager will issue a Change Order on AIA Document G701 (or other approved form), for all changes to the Contract Sum or the Contract Time.
- B. When Owner and Contractor disagree on the terms of a proposal, the CBJ Project Manager may issue a Construction Change Directive on AIA Document G714 (or other approved form), instructing Contractor to proceed with the change, for subsequent inclusion in a Change Order. Construction Change Directive will contain a description of the change and designate the method to be followed to determine changes to the Contract Sum or the Contract Time.

1.2 PAYMENT PROCEDURES

- A. Submit a Schedule of Values at least 10 days before the initial Application for Payment. Break down the Contract Sum into at least one line item for each significant component of the Work including, for example, mobilization, selective demolition, surface preparation, application of vapor barrier/primer, installation of cement overlay/underlay, application of finish system, thresholds, gypsum board, custom plastic base, demobilization, and final cleanup. Coordinate the Schedule of Values with Contractor's Construction Schedule.
 - 1. Round amounts to nearest whole dollar; total shall equal the Contract Sum.
 - 2. Provide separate line items in the Schedule of Values for initial cost of materials and for total installed value of that part of the Work.
- B. Submit an electronic copy (in PDF format) of each application for payment on AIA Document G702/703 (or other approved form) to the Architect of Record and CBJ Project Manager, according to the schedule established in Owner/Contractor Agreement. Ensure appropriate format and sufficient resolution for easy readability.
 - 1. With each Application for Payment, submit waivers of mechanic's liens from subcontractors, sub-subcontractors, and suppliers for construction period covered by the previous application.
 - 2. Submit final Application for Payment after completion of Project closeout procedures with release of liens and supporting documentation.
 - a. Include consent of surety to final payment on AIA Document G707 (or other approved form) and insurance certificates.
 - b. If applicable, submit final meter readings for utilities, a record of stored fuel, and similar data as of the date of Substantial Completion.
 - c. Include signed Alaska Department of Labor Prevailing Wage Notice of Completion form.
 - d. Include Alaska Department of Revenue Corporate Income Tax clearance.
 - e. Include signed City and Borough of Juneau Compliance Certificate and Release form.

SECTION 012000 - PRICE AND PAYMENT PROCEDURES

- f. Include a list of Subcontractors used on the Project and the total amount paid to each.
- g. Send originals of a. through f. to Greg Smith, City Engineering Contract Administrator, and copies of a. through f. to the CBJ Project Manager.

PART 2 - PRODUCTS (Not Applicable)

PART 3 - EXECUTION (Not Applicable)

SECTION 012100 - ALLOWANCES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements governing allowances.
 - 1. Certain items are specified in the Contract Documents by allowances. Allowances have been established in lieu of additional requirements and to defer selection of actual materials and equipment to a later date when direction will be provided to Contractor. If necessary, additional requirements will be issued by Change Order.
- B. Types of allowances include the following:
 - 1. Unit Cost allowances.
- C. Related Requirements:
 - 1. Section 035416.1 "Hydraulic Cement Overlay"

1.3 COORDINATION

A. Coordinate allowance items with other portions of the Work. Furnish templates as required to coordinate installation.

1.4 UNIT-COST ALLOWANCES

- A. Allowances shall include cost to Contractor of all material and labor required to chip, bush, clean and patch voids, delaminations and spalls, and to route, clean and fill cracks, exclusive of existing control joints, in existing concrete slab on grade.
 - 1. Concrete crack repair shall be in executed in conformance with Option 1 Hydraulic Cement Overlay or Option 2 Hydraulic Overlay (Underlay) manufacturer's recommendations.
- B. Contractor's costs for receiving and handling materials, overhead and profit, and similar costs related to the work described in article 1.4.A above shall be included as part of the Unit Cost Allowance.
- C. Bid Unit Costs: Include in Bid separate Unit Costs for the following:
 - 1. Concrete void, delamination and spall repair
 - 2. Concrete crack repair

SECTION 012100 - ALLOWANCES

1.5 ADJUSTMENT OF ALLOWANCES

A. Allowance Adjustment: Unit Cost Allowance values shall not be adjusted.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine existing conditions to determine quantity of repair work required. Report quantities to Architect and Owner for review and approval prior to execution of work.

3.2 COORDINATION AND INSTALLATION

A. Coordinate materials and their installation for allowances with related materials and installations to ensure that allowance work is completely integrated and interfaced with related work.

SECTION 012300 - ALTERNATES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for alternates.
- B. Section includes description of Deductive Alternates 1, 2 and 3.

1.3 DEFINITIONS

- A. Alternate: An amount proposed by bidders and stated on the Bid Form for certain work defined in the bidding requirements that may be added to or deducted from the base bid amount if Owner decides to accept a corresponding change either in the amount of construction to be completed or in the products, materials, equipment, systems, or installation methods described in the Contract Documents.
 - 1. Alternates described in this Section are part of the Work only if enumerated in the Agreement.
 - 2. The cost or credit for each alternate is the net addition to or deduction from the Contract Sum to incorporate alternate into the Work. No other adjustments are made to the Contract Sum.

1.4 PROCEDURES

- A. Coordination: Revise or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
- B. Notification: Immediately following award of the Contract, notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated revisions to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A schedule of alternates is included at the end of this Section.

SECTION 012300 - ALTERNATES

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 SCHEDULE OF ALTERNATES

- A. Deductive Alternate No. 1 Grind and Stain Existing Slab
 - 1. Delete the following Scope of work: All material and labor for existing slab surface preparation as described in Section 035416.1 "Hydraulic Cement Overlay".
 - 2. Delete the following Scope of work: All material and labor for application of vapor retarder/primer system as described in Section 035416.1 "Hydraulic Cement Overlay".
 - 3. Delete the following Scope of work: All material and labor for application of any overlay/underlay material as described in Section 035416.1 "Hydraulic Cement Overlay"
 - 4. Add the following scope of work: Grind existing slab to produce a uniformly smooth, clean, exposed aggregate surface.
 - 5. Retain the following scope of work: Repair of all existing slab voids, delaminations, spalls and cracks as described in Sections 012100 "Allowances" and 035416.1 "Hydraulic Cement Overlay".
 - 6. Modify the following scope of work: Execute all work described in section 033600 "Concrete Stain and Sealer" except delete all labor and material for application of urethane top coat.
- B. Deductive Alternate No. 2 Prepare and Epoxy Coat Existing Slab
 - 1. Retain the following Scope of work: All material and labor for existing slab surface preparation as described in Section 035416.1 "Hydraulic Cement Overlay".
 - 2. Retain the following Scope of work: All material and labor for application of vapor retarder/primer system as described in Section 035416.1 "Hydraulic Cement Overlay".
 - 3. Delete the following Scope of work: All material and labor for application of any overlay/underlay material as described in Section 035416.1 "Hydraulic Cement Overlay"
 - 4. Retain the following scope of work: All work described in section 097420 "Epoxy Flooring"
- C. Deductive Alternate No. 3 Use Control Joint manufacturer's standard removable Control Joint forming material and semi-rigid epoxy joint filler in lieu of double angle metal type control joint.

PART 1 - GENERAL

1.1 PROJECT MANAGEMENT AND COORDINATION

- A. Coordinate construction to ensure efficient and orderly installation of each part of the Work.
- B. A mandatory Preliminary Floor Renovation System Coordination Meeting shall be conducted within five business days of the Notice to Proceed. The meetings shall be conducted on the Project site and shall be attended by the Owner, Architect, Contractor, Applicator, and by Technical Representatives of each principal product to be used in the Floor Renovation project.
 - 1. The Floor Renovation build-up from existing slab on grade to top-most finish coat shall be considered a system with each principal product fully compatible and integrated. Principal products include:
 - a. Patching and Repair Material
 - b. Vapor Barrier/Primer System
 - c. Control Joint System
 - d. Option 1 Overlay or Option 2 Overlay (Underlay) System
 - e. Option 1 Concrete Stain or Option 2 Epoxy Coating System
 - f. Top Coat System
 - 2. The following shall be established in writing at the meeting:
 - a. Compatibility between individual components of Floor Renovation System.
 - b. Minimum acceptable bond-performance between individual components of Floor Renovation System.
 - c. Governing Warranty:
 - 1) Overlay or Overlay (Underlay) and Stain + Top Coat or Epoxy Coating + Top Coat system warranties shall be coordinated and the governing warranty shall be identified.
- C. Conduct progress meetings at Project site at weekly intervals unless otherwise approved by the CBJ Project Manager. Notify CBJ Project Manager and Architect of Record of meeting dates and times. Require attendance of each subcontractor or other entity concerned with current progress or involved with planning or coordination of future activities.
 - 1. Unless otherwise determined, the CBJ Project Manager will record minutes and distribute to each party present and to parties who should have been present.

1.2 SUBMITTAL PROCEDURES

- A. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals, and related activities that require sequential activity.
 - 1. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.

- 2. Architect of Record will return submittals, without review, received from sources other than Contractor.
- 3. Identify deviations from the Contract Documents on submittals.
- 4. Submit an electronic copy (in PDF format) of each submittal to the Architect of Record and CBJ Project Manager. Ensure sufficient resolution for easy readability.
- B. Place a label or title block on each submittal for identification. Include the following information on the label:
 - 1. Project name.
 - 2. Date.
 - 3. Name and address of Contractor.
 - 4. Name and address of subcontractor or supplier.
 - 5. Number and title of appropriate Specification Section.
- C. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions. Mark with approval stamp before submitting.
- D. Architect of Record will review each action submittal, make marks to indicate corrections or modifications required, stamp and mark as appropriate to indicate action taken, and return an electronic copy to the Contractor and CBJ Project Manager.
- E. Contractor's Construction Schedule Submittal Procedure: Submit and electronic copy (in PDF format) of schedule within 10 days after date established for Commencement of the Work. Ensure appropriate format and sufficient resolution for easy readability.

PART 2 - PRODUCTS

2.1 ACTION SUBMITTALS

- A. Product Data: Mark each copy to show applicable choices and options. Include the following:
 - 1. Data indicating compliance with specified standards and requirements.
 - 2. Notation of coordination requirements.
 - 3. For equipment, include rated capacities, dimensions, weights, required clearances, and furnished specialties and accessories.
- B. Shop Drawings: Submit Project-specific information drawn to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data. Include the following:
 - 1. Dimensions, fabrication and installation drawings, roughing-in and setting diagrams, and relationship to adjoining construction.
 - 2. Identification of products and materials.
 - 3. Notation of coordination requirements.
 - 4. Notation of dimensions established by field measurement.

C. Samples: Submit Samples finished as specified and physically identical with material or product proposed for use. Where variations are inherent in the material, submit three sets of paired units to show full range of variations. Include name of manufacturer and product name on label.

2.2 INFORMATION SUBMITTALS

- A. Qualification Data: Include lists of completed projects with project names and addresses, names and addresses of architects and owners, and other information specified.
- B. Product Certificates: Prepare written statements on manufacturer's letterhead, including signature of entity responsible for preparing certification, certifying that product complies with requirements.

2.3 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to the CBJ Project Manager.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, submit a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor, to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.

2.4 CONTRACTOR'S CONSTRUCTION SCHEDULE

- A. Gantt-Chart Schedule: Submit a comprehensive, fully developed, horizontal Gantt-chart-type schedule within 7 days of date established for the Notice to Proceed. Coordinate the schedule with the approved Schedule of Values.
- B. Time Frame: Extend schedule from date established for the Notice to Proceed to date of Final Completion.
 - 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Substantial Completion: The Owner desires Substantial Completion of the Work by December 16, 2016. However, to allow sufficient time for shipping and curing of floor systems, the Contractor may indicate a Substantial Completion date in the construction schedule as late as December 30, 2016.

- D. Distribute copies of approved schedule to CBJ Project Manager, Architect of Record, subcontractors, testing and inspecting agencies, and parties identified by Contractor with a need-to-know schedule responsibility.
- E. Updating: At monthly intervals, update schedule to reflect actual construction progress and activities. Issue schedule before each regularly scheduled progress meeting.
 - 1. As the Work progresses, indicate Actual Completion percentage for each activity.
- F. Revise the schedule after each meeting or activity where revisions have been made. As Work progresses, mark each bar to indicate actual completion. Distribute updated copies to same parties.

PART 3 - EXECUTION (Not Applicable)

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. Use Charges: Cost or use charges for temporary facilities shall be included in the Contract Sum.
- B. Use electric power from Owner's existing system without metering and without payment of use charges. Coordinate such use with the CBJ Project Manager.
- C. Electrical Service: Comply with NEMA, NECA, and UL standards and regulations for temporary electric service, if any. Install service to comply with NFPA 70.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

3.1 TEMPORARY UTILITIES

- A. General: Arrange with CBJ Project Manager for timing of service interruptions, if necessary.
- B. Sanitary Facilities: The Contractor may use the staff toilets located on the service corridor adjacent to the kitchen. However, the Contractor shall maintain the toilets in a clean condition at the end of each work day, and shall assure that the service corridor is not soiled with construction materials or debris.
- C. Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, and inspections.

3.2 TEMPORARY SUPPORT FACILITIES

- A. Provide field office, storage and fabrication sheds, and other support facilities as necessary for construction operations.
- B. Provide waste-collection containers in sizes adequate to handle waste from construction operations. Collect waste daily and, when containers are full, legally dispose of waste off-site. Comply with requirements of authorities having jurisdiction.
- C. Provide potable drinking water as required.

SECTION 015000 - TEMPORARY FACILITIES AND CONTROLS

3.3 TEMPORARY SECURITY AND PROTECTION FACILITIES

- A. Provide temporary environmental protection, operate temporary facilities, and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air pollution or other undesirable effects.
 - 1. Use positive dust and gas/odor collection systems during all dust producing activities, filtering and exhausting system air to the building exterior, away from occupied areas of the building.
- B. Provide measures to prevent airborne dust to adjacent properties and walkways, according to requirements of authorities having jurisdiction.
 - 1. Install temporary seals at all existing openings between the work area and all other adjacent areas of the building. Seals shall be maintained throughout all dust and gas/odor producing activity periods.
- C. Comply with requirements of authorities having jurisdiction for erecting structurally adequate barricades, including warning signs and lighting.

3.4 TERMINATION AND REMOVAL

A. Remove temporary facilities and controls no later than Substantial Completion.

SECTION 016000 - PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION REQUIREMENTS

- A. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
- B. Submittals: Submit an electronic copy (in PDF format) to the Architect of Record and CBJ Project Manager. Ensure appropriate format and sufficient resolution for easy readability.
- C. Product Substitutions: Substitutions include changes in products, materials, equipment, and methods of construction from those required by the Contract Documents and proposed by Contractor after award of the Contract.
 - 1. Submit requests within 7 days after the Notice of Award.
 - 2. Do not submit unapproved substitutions on Shop Drawings or other submittals.
 - 3. Identify product to be replaced and show compliance with requirements for substitutions. Include a detailed comparison of significant qualities of proposed substitution with those of the Work specified, a list of changes needed to other parts of the Work required to accommodate proposed substitution, and any proposed changes in the Contract Sum or the Contract Time should the substitution be accepted.
 - 4. Architect of Record will review the proposed substitution and notify Contractor of its acceptance or rejection by Change Order.

D. Comparable Product Requests:

- 1. Do not submit unapproved products on Shop Drawings or other submittals.
- 2. Identify product to be replaced and show compliance with requirements for comparable product requests. Include a detailed comparison of significant qualities of proposed substitution with those of the Work specified.
- 3. Architect of Record will review the proposed product and notify Contractor of its acceptance or rejection.
- E. Deliver, store, and handle products using means and methods that will prevent damage, deterioration, and loss, including theft. Comply with manufacturer's written instructions.
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction area.
 - 2. Deliver products to Project site in manufacturer's original sealed container or packaging, complete with labels and instructions for handling, storing, unpacking, protecting, and installing.
 - 3. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
 - 4. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.

SECTION 016000 - PRODUCT REQUIREMENTS

F. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.

PART 2 - PRODUCTS

2.1 PRODUCT OPTIONS

- A. Provide products that comply with the Contract Documents, are undamaged, and are new at the time of installation.
 - 1. Provide products complete with accessories, trim, finish, and other devices and components needed for a complete installation and the intended use and effect.
 - 2. Descriptive, performance, and reference standard requirements in the Specifications establish "salient characteristics" of products.

B. Product Selection Procedures:

- 1. Where Specifications name a single product or manufacturer, provide the item indicated that complies with requirements.
- 2. Where Specifications include a list of names of products or manufacturers, provide one of the items indicated that complies with requirements.
- 3. Where Specifications include a list of names of products or manufacturers, accompanied by the term "available products" or "available manufacturers," provide one of the named items that complies with requirements. Comply with provisions for "comparable product requests" for consideration of an unnamed product.
- 4. Where Specifications name a product as the "basis-of-design" and include a list of manufacturers, provide the named product. Comply with provisions for "comparable product requests" for consideration of an unnamed product by the other named manufacturers.
- 5. Where Specifications name a single product as the "basis-of-design" and no other manufacturers are named, provide the named product. Comply with provisions for "comparable product requests" for consideration of an unnamed product by another manufacturer.
- C. Unless otherwise indicated, Architect of Record will select color, pattern, and texture of each product from manufacturer's full range of options that includes both standard and premium items.

PART 3 - EXECUTION (Not Used)

PART 1 - GENERAL

1.1 CLOSEOUT SUBMITTALS

- A. Record Drawings: Maintain a set of prints of the Contract Drawings as Record Drawings. Mark to show actual installation where installation varies from that shown originally.
 - 1. Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
- B. Operation and Maintenance Data: Submit two (2) copies of manual. Organize data into threering binders with identification on front and spine of each binder, and envelopes for folded drawings. Include the following:
 - 1. Manufacturer's operation and maintenance documentation.
 - 2. Maintenance and service schedules.
 - 3. Maintenance service contracts.
 - 4. Copies of warranties.

C. Final Close Out Items

- 1. Include consent of surety to final payment and insurance certificates.
- 2. Include Alaska Department of Labor Employment Security Tax clearance.
- 3. Include signed Alaska Department of Labor Prevailing Wage Notice of Completion form.
- 4. Include Alaska Department of Revenue Corporate Income Tax clearance
- 5. Include signed City and Borough of Juneau Compliance Certificate and Release form.
- 6. Include a list of Subcontractors used on the Project and the total amount paid to them.
- 7. Send originals of items 1 through 6 above to Greg Smith, City Engineering Contract Administrator, and copies of items 1 6 above to the CBJ Project Manager.

PART 2 - EXECUTION

2.1 EXAMINATION AND PREPARATION

- A. Examine substrates and conditions for compliance with manufacturer's written requirements including, but not limited to, surfaces that are sound, level, plumb, smooth, clean, and free of deleterious substances; substrates within installation tolerances; and application conditions within environmental limits. Proceed with installation only after unsatisfactory conditions have been corrected.
- B. Take field measurements as required to fit the Work properly. Where fabricated products are to be fitted to other construction, verify dimensions by field measurement before fabrication and, when possible, allow for fitting and trimming during installation.

2.2 CUTTING AND PATCHING

- A. Do not cut structural members or operational elements without prior written approval of the CBJ Project Manager.
- B. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.

2.3 INSTALLATION

- A. Comply with manufacturer's written instructions for installation. Anchor each product securely in place, accurately located and aligned with other portions of the Work. Clean exposed surfaces and protect from damage.
- B. Clean Project site and work areas daily.

2.4 FINAL CLEANING

- A. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion:
 - 1. Remove labels that are not permanent.
 - 2. Clean transparent materials.
 - 3. Clean exposed finishes to a dust-free condition, free of stains, films, and foreign substances.
 - 4. Clean Project site, yard, and grounds, in areas disturbed by construction activities. Sweep paved areas; remove stains, spills, and foreign deposits. Rake grounds to a smooth, even-textured surface.

2.5 CLOSEOUT PROCEDURES

- A. Substantial Completion: Before requesting Substantial Completion inspection, complete the following:
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise CBJ Project Manager of pending insurance changeover requirements.
 - 3. Submit specific warranties, maintenance service agreements, and similar documents.
 - 4. Submit Record Drawings and Specifications, operation and maintenance manuals, and similar final record information.
 - 5. Remove temporary facilities and controls.
 - 6. Complete final cleaning requirements, including touchup painting.
 - 7. Touch up and otherwise repair and restore marred exposed finishes to eliminate visual defects.
- B. Submit a written request for inspection for Substantial Completion. On receipt of request, Architect of Record will proceed with inspection or advise Contractor of unfulfilled requirements. Architect of Record will prepare the Certificate of Substantial Completion after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued.

- C. Request inspection for Final Completion, once the following are complete:
 - 1. Submit a copy of Substantial Completion inspection list stating that each item has been completed or otherwise resolved for acceptance.
- D. Request reinspection when the Work identified in previous inspections as incomplete is completed or corrected.
- E. Submit a written request for final inspection for acceptance. On receipt of request, Architect of Record will proceed with inspection or advise Contractor of unfulfilled requirements. Architect of Record will prepare final Certificate for Payment after inspection or will advise Contractor of items that must be completed or corrected before certificate will be issued.

PART 3 – EXCECUTION (Not Used)

COMPLIANCE CERTIFICATE AND RELEASE FORM

PROJECT: <u>Centennial Hall Floor Renovation</u> CONTRACT NO: BE17-156

The CONTRACTOR must complete and submit this to the Contract Administrator. 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 than 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 Contract Administrator was advised and approved of all Subcontractors before WORK was performed and has approved any substitutions, additions or deletions 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 Contract Administrator 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.

	Capacity: CONTRACTOR	
Firm Name		
Signed	Printed Name and Title	Date

Return completed form to: Greg Smith, Contract Administrator, Engineering Contracts Division, 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.

END OF SECTION 017010

CENTENNIAL HALL FLOOR RENOVATION CBJ Contract No. BE17-156 EXECUTION AND CLOSEOUT REQUIREMENTS
Page 017010 - 4

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Removal and reinstallation of elements of the building including but not limited to:
 - 1. Existing electrical raceways and devices
 - 2. Existing data cables and devices
 - 3. Existing mechanical ducts and diffusers
 - 4. Existing trims conflicting with installation of new Impact Resistant Gypsum Board
 - 5. Existing to remain wall mounted items
- 2. Demolition and removal of selected portions of building or structure including but not limited to:
 - 1. Existing plastic base
 - 2. Existing wood floor system and adhesive
 - 3. Existing lower ~24" of gypsum wall board
 - 4. Existing coating and overlayment at loading door
 - 5. Existing temporary floor coverings
- 3. Limited demolition and/or modification of existing elements of the building to otherwise remain in place including, but not limited to:
 - 1. Existing clean-outs in floor surface

B. Related Requirements:

- 1. Section 011000 "Summary" for restrictions on use of the premises, Owner-occupancy requirements, and phasing requirements.
- 2. Section 015000 "Temporary Facilities and Controls" For environmental control during Selective Demolition activities.
- 3. Section 017300 "Execution" for cutting and patching procedures.

1.3 DEFINITIONS

- A. Remove: Detach items from existing construction and dispose of them off-site unless indicated to be salvaged or reinstalled.
- B. Remove and Salvage: Detach items from existing construction, in a manner to prevent damage, and store.

- C. Remove and Reinstall: Detach items from existing construction, in a manner to prevent damage, prepare for reuse, and reinstall where indicated.
- D. Existing to Remain: Leave existing items that are not to be removed and that are not otherwise indicated to be salvaged or reinstalled.
- E. Dismantle: To remove by disassembling or detaching an item from a surface, using gentle methods and equipment to prevent damage to the item and surfaces; disposing of items unless indicated to be salvaged or reinstalled.

1.4 MATERIALS OWNERSHIP

A. Unless otherwise indicated, demolition waste becomes property of Contractor.

1.5 PREINSTALLATION MEETINGS

- A. Predemolition Conference: Conduct conference at Project site.
 - 1. Inspect and discuss condition of construction to be selectively demolished.
 - 2. Review and finalize selective demolition schedule and verify availability of materials, demolition personnel, equipment, and facilities needed to make progress and avoid delays.
 - 3. Review restrictions on demolition activities to coordinate activities with operations of the facility.
 - 4. Restrictions on demolition techniques to ensure remaining building elements are in suitable condition of application of new materials
 - 5. Review requirements of work performed by other trades that rely on substrates exposed by selective demolition operations.
 - 6. Review areas where existing construction is to remain and requires protection.

1.6 INFORMATIONAL SUBMITTALS

- A. Survey: Submit to-scale survey of condition of existing floor identifying existing control joints and cracks.
- B. Proposed Protection Measures: Submit report, including Drawings, that indicates the measures proposed for protecting individuals and property for dust control and for noise control, and to protect building elements to remain in place. Indicate proposed locations and construction of barriers.
- C. Schedule of Selective Demolition Activities: Indicate the following:
 - 1. Sequence of selective demolition and removal work, with starting and ending dates for each activity. Ensure Owner's on-site operations are uninterrupted.
 - 2. Interruption of utility services. Indicate how long utility services will be interrupted.
 - 3. Coordination for shutoff, capping, and continuation of utility services.

- 4. Coordination of Owner's continuing occupancy of portions of existing building and of Owner's partial occupancy of completed Work.
- D. Predemolition Photographs or Video: Show existing conditions of adjoining construction, including finish surfaces that might be misconstrued as damage caused by demolition operations.

1.7 CLOSEOUT SUBMITTALS

A. Inventory: Submit a list of items that have been removed and salvaged.

1.8 FIELD CONDITIONS

- A. Owner will occupy portions of building immediately adjacent to selective demolition area. Conduct selective demolition so Owner's operations will not be disrupted.
- B. Conditions existing at time of inspection for bidding purpose will be maintained by Owner as far as practical.
 - 1. Before selective demolition, Owner will remove the following items:
 - 1. All free-standing items otherwise in work area
 - 2. Any non-building elements wall mounted below 6' above existing floor surface.
- C. Notify Architect of discrepancies between existing conditions and Drawings before proceeding with selective demolition.
- D. Hazardous Materials: It is believed that hazardous materials will not be encountered in the Work. Samples for testing for the presence of asbestos were taken of the ballroom floor mastic and of gypsum wall board, though in other areas of the building, not from the ballroom. Test results for both sample sets were negative.
 - 1. Test reports are available
- E. Storage or sale of removed items or materials on-site is not permitted.
- F. Utility Service: Maintain existing utilities to remain in service and protect them against damage during selective demolition operations.
 - 1. Maintain fire-protection facilities in service during selective demolition operations.

1.9 WARRANTY

1.10 COORDINATION

A. Arrange selective demolition schedule so as not to interfere with Owner's operations.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS

- A. Regulatory Requirements: Comply with governing EPA notification regulations before beginning selective demolition. Comply with hauling and disposal regulations of authorities having jurisdiction.
- B. Standards: Comply with ASSE A10.6 and NFPA 241.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Verify that utilities have been disconnected and capped before starting selective demolition operations.
- B. Review Project Record Documents of existing construction provided by Owner. Owner does not guarantee that existing conditions are same as those indicated in Project Record Documents.
- C. Survey of Existing Conditions: Record existing conditions by use of preconstruction photographs.
 - 1. Before selective demolition or removal of existing building elements that will be reinstalled, reproduced or duplicated in final Work, make permanent record of measurements, materials, and construction details required to make exact reproduction.
- D. Survey of Existing Conditions: Upon completion of removal of existing wood floor system, record existing conditions by use of scale drawings indicating spot elevations to determine variation in existing slab surface, and indicating location of all joints and significant cracks (cracks equal to or greater than 1/32" in width).
 - 1. Submit survey drawing to Owner and Architect

3.2 UTILITY SERVICES AND MECHANICAL/ELECTRICAL SYSTEMS

- A. Existing Services/Systems to Remain: Maintain services/systems indicated to remain and protect them against damage.
 - 1. All electrical devices and raceways located within 27" of the existing floor surface shall be carefully removed, temporarily supported, and reinstalled in their original position as required to allow installation of blocking for new gypsum board panels and custom plastic base.
 - 2. All mechanical ducts and/or diffusers located within 27" of the existing floor surface shall be carefully removed, temporarily supported, and reinstalled in their original position as required to allow installation of blocking for new gypsum board panels and custom plastic base.

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- 3. Existing clean-outs: Carefully remove adjacent concrete as required to allow clean-out to be cut down and refitted with flange and cap flush with new overlay floor.
- 4. All other in-floor mechanical or electrical devices otherwise not indicated are intended to remain. Carefully remove adjacent concrete as required to allow devices to be reposition such that their exposed service face is flush with the new overlay floor.
- B. Existing Services/Systems to Be Removed, Relocated, or Abandoned: Locate, identify, disconnect, and seal or cap off utility services and mechanical/electrical systems serving areas to be selectively demolished.
 - 1. Owner will arrange to shut off services/systems as required when requested by Contractor. Provide Owner with no less than 24 hours notice of request.
 - 2. Owner will arrange to shut off building utilities if necessary when requested by Contractor. Provide Owner with no less than 72 hours notice of request.
 - 3. If services/systems are required to be removed, relocated, or abandoned, provide temporary services/systems that bypass area of selective demolition and that maintain continuity of services/systems to other parts of building.

3.3 ARCHITECTURAL ELEMENTS

A. All architectural elements including trim within 27" of the existing floor surface shall be carefully removed and reinstalled in their original position as required to allow installation of blocking, new gypsum board panels and custom plastic base.

3.4 PROTECTION

- A. Temporary Protection: Provide temporary barricades and other protection required to prevent injury to people and damage to adjacent facilities to remain.
 - 1. Provide protection to ensure safe passage of people around selective demolition area and to and from occupied portions of building.
 - 2. Protect walls, floors, and other existing finish work that are to remain or that are exposed during selective demolition operations.
 - 3. Cover and protect furniture, furnishings, and equipment that have not been removed.
 - 4. Comply with requirements for temporary enclosures, dust control, heating, and cooling specified in Section 015000 "Temporary Facilities and Controls."
- B. Remove temporary barricades and protections where hazards no longer exist.

3.5 SELECTIVE DEMOLITION, GENERAL

A. General: Demolish and remove existing construction only to the extent required by new construction and as indicated. Use methods required to complete the Work within limitations of governing regulations and as follows:

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- 1. Proceed with selective demolition systematically.
- 2. Make any cuts required neat and true to dimensions required. Use cutting methods least likely to damage construction to remain or adjoining construction. Use hand tools or small power tools designed for sawing or grinding, not hammering and chopping. Temporarily cover openings to remain.
- 3. Cut or drill from the exposed or finished side into concealed surfaces to avoid marring existing finished surfaces.
- 4. Do not use cutting torches.
- 5. Maintain adequate ventilation for all demolition activities.
- 6. Remove decayed, vermin-infested, or otherwise dangerous or unsuitable materials and promptly dispose of off-site.
- 7. Dispose of demolished items and materials promptly.
- B. 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.
- C. Removed and Reinstalled Items:
 - 1. Clean and repair items to functional condition adequate for intended reuse.
 - 2. Temporarily support and protect in-place items which cannot be entirely removed.
 - 3. Pack or crate items after cleaning and repairing. Identify contents of containers.
 - 4. Protect items from damage during transport and storage.
 - 5. Reinstall items in or as close as possible to original location. Comply with installation requirements for new materials and equipment. Provide connections, supports, and miscellaneous materials necessary to make item functional for use indicated.
- D. Existing Items to Remain: Protect construction indicated to remain against damage and soiling during selective demolition. When permitted by Architect, items may be removed to a suitable, protected storage location during selective demolition, cleaned and reinstalled in their original locations after selective demolition operations are complete.

3.6 SELECTIVE DEMOLITION PROCEDURES

- A. Use methods which will not damage materials or elements intended to remain.
- B. Do not use solvents of any kind for selective demolition activities.

3.7 DISPOSAL OF DEMOLISHED MATERIALS

- A. Remove demolition waste materials from Project site and dispose of them in an EPA-approved construction and demolition waste landfill acceptable to authorities having jurisdiction.
 - 1. Do not allow demolished materials to accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn demolished materials.

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3.8 CLEANING

A. 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.

END OF SECTION 024119

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Moisture vapor emission testing.
 - 2. Surface preparation.
 - 3. Joint treatment.
 - 4. Furnishing and installation of acid based stain, epoxy primer and chemical resistant polyurethane floor system.

B. Related Sections:

- 1. Section 013000 Administrative Requirements
 - a. For mandatory pre-mobilization coordination meeting.
- 2 . Section 035416 Hydraulic Cement Overlay
 - a. Overlays on concrete slabs on or below grade shall be installed over an effective moisture vapor barrier.
 - b. Overlays shall be fully cured and certified by overlay manufacturer as suitably cured to receive stain and finish system, be structurally sound and have a smooth, uniform surface.
 - c. Surface shall be straight and level with the permissible degree of tolerance of maximum 1/8" in 10'-0" in any direction.
 - d. No curing compounds or surface contaminants shall be used in placing new overlays.

1.2 DEFINITIONS

A. "Phase": See DEFINITIONS under Section 035416.1 "Hydraulic Cement Overlay"

1.3 SYSTEM DESCRIPTION

- A. The flooring system shall consist of an acid-based concrete stain followed by a clear epoxy primer coat and a clear polyurethane finish coat. Total dry film thickness shall be 10-12 mils.
- B. Finished flooring system shall have the following performance characteristics:
 - 1. Gloss (60 degrees): 50-60
 - 2. Hardness (sward): 30
 - 3. Tabor Abrasion: (1000 gm load, 1000 cycles, CS-17 wheel): 18 mg loss.
 - 4. Flexibility (ASTM D-222): Passes 1/8 inch.
 - 5. Impact Resistance (ASTM D-2794): Passes 160 inch-pounds direct and reverse.
- C. Chemical Resistance: (ASTM D-1308 7-day exposure) Unaffected by the following:

- 1. Brake Fluid
- 2. Skydrol B-4
- 3. Gasoline
- 4. Hydraulic Fluid #83282
- 5. Mineral Spirits
- 6. Xylene
- 7. 50% Sodium Hydroxide
- 8. 25% Hydrochloric Acid
- 9. 25% Sulphuric Acid

1.4 SUBMITTALS

- A. Submit manufacturer's product data.
- B. Submit stain and resinous material manufacturers' project specific written certifications that the stain and finish flooring systems are fully compatible with the substrate to which they will be applied and suitable for their intended uses.
- C. Submit manufacturer's samples showing color choices and texture.
- D. Prior to commencing work, installer shall prepare two 4'x 4' samples onsite of the resinous flooring chosen for the project showing actual color, thickness and texture. These samples shall serve as a basis for comparison throughout the duration of the work.

1.5 PREINSTALLATION MEETINGS

- A. Pre-Mobilization Coordination Meeting: See Section 013000 "Administrative Requirements".
- B. Preinstallation Conference: Conduct conference at Project site with Owner, Architect, Installer General Contractor and Manufacturer's representative present. Allow a minimum of two hours.

1.6 MOCK-UP

- A. Mock-up: Upon completion of substrate preparation, prepare a mock-up incorporating all layers of the stain and finish flooring system. The Mock-up shall be installed where directed by the Architect, and shall cover a full phase area. The Mock-up shall be installed using methods and sequences identical to those intended for use in installation of the balance of the stain and finish flooring system.
- B. Acceptance: Mock-up installation shall be observed and evaluated by the Architect and stain and finish floor system manufacturer.
 - 1. The Contractor shall provide the stain and finish flooring manufacturer's written evaluation and certification of the Mock-up, indicating the quality of the material and workmanship as a condition of the manufacturer's provision of the Material Warranty.
 - 2. Work to install the balance of the stain and finish flooring system shall not proceed until the manufacturer's written evaluation has been reviewed and accepted in writing by the Owner and Architect.

- 3. Should the Mock-up not be accepted due to observation identified material failure or unacceptable workmanship, at the Contractor's expense, all mock-up material shall be removed, the substrate re-prepared and a new Mock-up shall be installed for review and acceptance.
- 4. The Mock-up may be incorporated into the work if accepted by the Owner and Architect.

1.7 QUALITY ASSURANCE

- A. All resin material used in this system shall be manufactured by a single manufacturer to ensure compatibility and proper bonding.
- B. Applicator must have a minimum of 3 years experience in installing polymeric flooring systems and be certified by the manufacturer.
- C. All work shall be performed in strict accordance with the manufacturer's written instructions.

1.6 DELIVERY, STORAGE AND HANDLING

A. All material shall be delivered to the jobsite in unopened containers clearly labeled by the manufacturer and stored in a dry location at a minimum of 65 degrees F.

1.7 WARRANTY

- A. Manufacturer shall guarantee that his materials are free from defects and comply with published specifications.
- B. Applicator shall warranty against faulty workmanship and against product application failure including delamination, discoloration, clouding or blistering.
 - 1. Term of Warranty: 5 years from date of substantial completion.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Resin materials shall be supplied by Arizona Polymer Flooring Inc., Glendale, AZ (800)562-4921, and as distributed by Industrial Coatings & Sealants, Mukilteo, WA (425)742-5693.
- B. Acid stain materials shall be supplied by Kemiko (a division of EPMAR), Whittier, CA (562-946-8781, and as distributed by Industrial Coatings & Sealants, Mukilteo, WA (425)742-5693
- C. Approved Equal: See Section 016000 "Product Requirements" for substitution procedures.

2.2 MATERIALS

- A. Stain: Kemiko acid stain
- B. Primer: 100 percent volume solids amine-cured epoxy
- C. Finish Coat: 90 percent volume solids, three-component, aliphatic chemical resistant polyurethane.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions:
 - 1. Inspect surfaces to receive floor system.
 - 2. Conduct calcium chloride moisture vapor emission testing according to ASTM 1869-04. If test reading is above three pounds, consult Architect and Manufacturer before proceeding.
 - 3. Before starting work, report in writing to the Architect and manufacturer any unsatisfactory conditions. Work may not proceed until unsatisfactory conditions have been corrected to Architect's and manufacturer's satisfaction.
 - 4. Application of any material shall signify that surfaces have been inspected and are satisfactory.

3.2 SURFACE PREPARATION

A. Surfaces to receive resinous flooring system shall be installed over a new hydraulic cement based polymer modified overlay system compatible with Kemiko acid stain and the APF sealer system (see Section 035416.1) except as allowed by Section 012300 "Alternates". All surfaces must be clean and dry prior to resinous flooring installation.

3.3 INSTALLATION

- A. Allow sufficient time for the installation of the flooring system. At no time shall the speed of project completion be allowed to detrimentally affect the application.
- B. Provide sufficient light, power, heat and working conditions to permit proper application of the materials. Substrate temperature shall be at a minimum of 50°F during application and for 48 hours thereafter.
- C. Mechanically clean and fill all joints, cracks and spalls with Epoxy 300 Flex paste, or other approved filler, per manufacturer's instructions. Allow to cure and sand smooth.
- D. Apply Kemiko acid stain at a rate of 300-400 sq. sf. per gallon.
- E. Rinse and neutralize stain residue using Kemiko Neutra Clean. Allow the concrete to dry for a minimum of 24 hours.
- F. Apply a prime coat of Epoxy 400 with UV stabilizer at 200-250 sq.ft. per gallon.
- G. Apply finish coat of Polyurethane 325 at 350-400 sq. ft. per gallon.

3.4 FIELD QUALITY CONTROL

A. Installer shall monitor the thickness of the system as the work progresses. Areas found not to meet the required thickness shall receive additional material until desired thickness is attained.

3.5 PROTECTION

A. Installation areas must be kept free from traffic and other trades during the application procedure and cure time.

3.6 MAINTENANCE

A. Floor should be cleaned with ammonia and water or a mild, non-filming detergent. For difficult stains, paint thinner may be used without harming the finish.

END OF SECTION 033600

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- B. Section 012100 "Allowances"
 - 1. This section for existing concrete surface repair and patching.
- C. Section 012300 "Alternates"
 - 1. This section for deductive alternate for elimination of overlay.
 - 2. This section for deductive alternate for use of alternate control joint type in lieu of metal double angle type.
- D. Section 013000 "Administrative Requirements"
 - 1. This section for mandatory pre-mobilization coordination meeting.
- E. Section 015000 "Temporary Facilities and Controls"
 - 1. This section for environmental controls and duct containment during surface preparation activities.
- F. Section 024119 "Selective Demolition"

1.2 SUMMARY

- A. Section includes: The preparation for and installation of pre-proportioned, polymer-modified, self-leveling, bonded hydraulic cement overlay for application to existing concrete slab on grade. Installation shall be in phases.
 - 1. Surface repair and patching
 - 2. Surface preparation and cleaning
 - 3. Pre-installation Quality Control testing
 - 4. Material quantities
 - 5. Vapor barrier/primer system
 - 6. Control joints and permanent pour stops
 - 7. Polymer-modified, self-leveling, bonded hydraulic cement overlay
 - 8. Curing
 - 9. Post-installation Quality Control testing

1.3 DEFINITIONS:

- A. Overlay: A hydraulic cement based polymer modified topping for use on an existing concrete slab surface intended to receive finishing products. Both Overlay and Underlay type products will be referred to as Overlay products for convenience in this section except specifically in article 2.3.
- B. Phase: That area of the overlay surface defined by control joints and/or bordering walls. Phases shall be determined by the Architect based on as-built drawings provided by the Contractor.
- C. Excessive Cracking: Aggregate quantity of cracks within a single phase area in excess of 10 linear feet or any crack in excess of 30mils in width.

1.4 ALLOWANCES AND UNIT PRICES

A. Allowances and Unit Prices are affected by this section for concrete repair and patching.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product and accessory
 - 1. Include Control Joint system manufacturer's product data for complete Control Joint system.

B. Shop Drawings:

- 1. Existing Conditions Plans: indicating minimum and maximum elevations of existing slab surface and indicating to scale all existing control joints and major cracks.
- 2. Proposed Plan: indicating minimum and maximum depths of overlay based on survey of substrate conditions and indicating to scale all proposed control joints, permanent pour stops and warps and/or ramps at wall openings.
- 3. Details: dimensioned and annotated graphically depicting control joints, warps and /or ramps at wall openings
 - a. Include Control Joint system manufacturer's details for complete Control Joint system.

C. Samples:

- 1. 12" x 12" applied to rigid board of each overlay option, ground and polished as applicable, but otherwise unfinished.
- 2. Semi-rigid epoxy sealant: applied to presentation board to exhibit color.

D. Qualification Data: For Installer

- 1. Manufacturer's current, written certification of Installer.
- 2. Evidence of a minimum of three projects similar in scale using the same product applied to existing slabs on grade.

E. Sample Warranties:

- 1. Manufacturer's written Material Warranty
- 2. Contractor's written Installation and Workmanship Warranty

F. Close-Out Submittals

- 1. Complete product data for Owner's file
- 2. Maintenance Data
- 3. Repair Instructions
- 4. Warranty Monitoring walk-through schedule and agreement

1.6 PREINSTALLATION MEETING

- A. Pre-Mobilization Coordination Meeting: See Section 013000 "Administrative Requirements".
- B. Preinstallation Conference: Conduct conference at Project site with Owner, Architect, Installer General Contractor and Manufacturer's representative present. Allow a minimum of two hours.

1.7 MOCK-UP

- A. Mock-up: **Prior to beginning overall substrate preparation**, prepare a mock-up incorporating all layers of the built-up overlay assembly including the Vapor Barrier System. The Mock-up shall be installed where directed by the Architect. The Mock-up shall be installed using methods and sequences identical to those intended for use in installation of the balance of the overlay material.
 - 1. The system indicated for use here uses a mechanical bond between the overlay and the vapor barrier/primer layer through aggregate interlock rather than a traditional bond. This is an adequate bonding method, but can be difficult to achieve. It is critical that the system be mocked-up and tested to ensure the contractor's surface preparation and application means and methods will achieve a fully developed bond prior to commencing overall surface preparation of the existing slab surface.
 - 2. Anticipate up to two additional Mock-ups as necessary to allow modification and reevaluation of surface preparation and application means and methods to ensure a fully developed bond.
- B. Acceptance: The Mock-up shall be subject to all pre-installation and post installation testing. Mock-up installation shall be observed and evaluated by the Architect and overlay manufacturer.
 - 1. The Contractor shall provide the overlay manufacturer's written evaluation and certification of the Mock-up, indicating the quality of the material and workmanship as a condition of the manufacturer's provision of the Material Warranty.
 - 2. The Owner's testing agency shall conduct all tests indicated and provide written test data to the Architect and Owner for review.
 - 3. Work to install the balance of the overlay material shall not proceed until the manufacturer's written evaluation and all test data has been reviewed and accepted in writing by the Owner and Architect.

- 4. Should the Mock-up not be accepted due to observation and/or test identified material failure or unacceptable workmanship, at the Contractor's expense, all mock-up material shall be removed, the substrate re-prepared per articles 3.2 and 3.5 of this Section, and a new Mock-up shall be installed for review and acceptance.
- 5. The Mock-up may be incorporated into the work if accepted by the Owner and Architect.

1.8 QUALITY ASSURANCE

- A. Installer Qualifications: Installer who is approved by manufacturer for application of underlayment products required for this Project.
- B. Testing Agency Qualifications: An agency acceptable to the Owner and experienced in conducting the following tests:
 - 1. ASTM C109 / C109M Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)
 - 2. ASTM C348-14 Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars
 - 3. ASTM C 1583 Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)

1.9 WARRANTIES

- A. Manufacturers Material Warranty:
 - 1. Warranty against product defects resulting in inadequate bond to substrate, delamination, spalling and softness, excessive porosity and/or inadequate compressive strength.
 - 2. Manufacturer's Material Warranty shall include monitoring of system performance over the term of the warranty.
 - a. Conduct Warranty Observation walk-throughs with the applicator at one, three and five year intervals.
 - 3. Term of Warranty: 5 years from date of substantial completion
- B. Contractor's Installation and Workmanship Warranty:
 - 1. Warranty against Installation and Workmanship defects resulting in inadequate bond to substrate; delamination; spalling; softness, excessive porosity and/or inadequate compressive strength and excessive cracking.
 - 2. Manufacturer's Material Warranty shall include monitoring of system performance over the term of the warranty.
 - a. Conduct Warranty Observation walk-throughs with the manufacturer at one, three and five year intervals.
 - 3. Term of Warranty: 5 years from date of substantial completion

1.10 FIELD CONDITIONS

A. Existing Conditions:

- 1. Upon completion of Selective Demolition, Contractor shall survey the existing slab surface to identify minimum and maximum slab elevations.
- 2. Upon completion of Selective Demolition and Initial Surface Preparation, Architect shall sound test the entire existing slab surface with the Contractor present to identify and mark all areas of spalled and/or delaminating concrete. Sound testing shall be by the chain drag or other approved method.
- 3. Upon completion of Selective Demolition and Initial Surface Preparation, Architect shall visually examine the entire existing slab surface with the Contractor present to identify and mark all existing joints and cracks. Existing Joints and cracks shall be mapped by the Contractor and submitted to the Architect to become the basis of the phase plan which will be prepared by the Architect.
- 4. Upon completion of Final Surface Preparation the substrate shall be tested for Moisture Vapor Transmission Rate, Relative Humidity and alkalinity. Tests shall be performed by the Contractor and witnessed by the Architect. Tests shall be performed at the frequency required by the Manufacturer and results shall be reported to Owner, Architect and Overlay manufacturer for approval prior to application of any products to substrate.

B. Quantities:

- 1. Overlay material quantities shall be based on an average application thickness of Five Eighths (5/8") over the full area defined in the plans. Actual quantities shall be field verified through surveying. The difference between the estimated and actual quantities shall be addressed as follows:
 - a. Cost value of delta in quantity when actual is greater than estimated shall be drawn from allowance.
 - b. Cost value of delta in quantity when actual is less than estimated shall be credited to Owner by Change Order.
- C. Environmental Limitations for Application: Comply with manufacturer's written instructions for substrate temperature, ventilation, ambient temperature and humidity, and other conditions affecting underlayment performance.
 - 1. Place hydraulic cement overlay only when ambient temperature and temperature of substrate are within range specified by manufacturer.
 - 2. Place hydraulic cement overly only when substrate Moisture Vapor Transmission Rate and Relative Humidity are below maximums specified by manufacturer.

PART 2 - PRODUCTS

2.1 EQUIPMENT

- A. Surface Preparation Equipment: Use equipment capable of removing deleterious materials including adhesives, coatings and deficient concrete which would inhibit the bond of the overlay. Equipment includes:
 - 1. Mechanical blast cleaning equipment:
 - a. High pressure shot blasting equipment capable of removing weak concrete and micro-fractured concrete surfaces.
 - b. Shall have oil trap
 - 2. Hand-held blast cleaning equipment:
 - a. High pressure abrasive blasting equipment capable of removing adhesives, coatings, laitance and rust and scale where occurring on any exposed metal surfaces.
 - b. Shall be capable of thoroughly roughening concrete surface to aid bond of overlay.
 - c. Shall have oil trap.
 - 3. Mechanical scarifying equipment:
 - a. Power operated capable of uniformly scarifying or removing up to ½" of the existing concrete surface.
 - b. Shall have oil trap.

2.2 OPTION 1 - POLISHED HYDRAULIC CEMENT OVERLAY FOR USE WITH INTEGRAL COLOR AND TOPICAL STAIN FINISH WHERE THE OVERLAY IS THE WEAR LAYER

- A. Source Quality Control: The following products shall be obtained from same manufacturer and be fully coordinated and compatible with each other to result in a manufacturer's complete certified system:
 - 1. Overlay material
 - 2. Integral coloring agent
 - 3. Vapor Barrier/Primer System

B. Products:

- 1. Ardex PC-T Polished Concrete Topping
- 2. Approved Equal: See Section 016000 "Product Requirements" for substitution Procedures.
- C. Hydraulic Cement Overlay: Pre-proportioned, polymer-modified, self-leveling, Portland cement product that can be applied in minimum uniform thickness of 3/8" inch and up to 1". The overlay shall be capable of fully bonding to the prepared substrate without delamination, shall exhibit flexural strength to limit cracking caused by movement and/or cracking of the substrate

except at new control joints, be suitable to accept a mechanical polishing process and be of material character to accept integral color and penetrating stain.

- 1. Cement Binder: ASTM C 150/C 150M, Portland cement, or hydraulic or blended hydraulic cement as defined by ASTM C 219.
- 2. Compressive Strength: Not less than 6000 psi at 28 days when tested according to ASTM C 109/C 109M.
- 3. Flexural Strength: 1200 psi at 28 days when tested according to ASTM C 78
- 4. Flow time: 10 minutes
- 5. Initial set time: 30 minutes min.
- 6. Final set time: 90 minutes
- 7. Color: Light gray
- D. Aggregate: Well-graded, washed gravel, 1/8 to 1/4 inch (3 to 6 mm); or coarse sand as recommended by overlay manufacturer. Aggregate is required for appearance of product. Reduce aggregate size as required for minimum thickness of overlay anticipated.
 - 1. Provide aggregate as recommended in writing by overlay manufacturer for overlay thickness required.
 - 2. Provide manufacturer's written verification of maximum aggregate size allowed for minimum thickness of overlay anticipated.
- E. Water: Potable and at a temperature within manufacturer's recommended range.
- F. Integral Color: Powder or liquid pigment for integral use with overlay, capable of fully tinting entire cross section of overlay a uniform color, and compatible with overlay and vapor barrier system materials.
- 2.3 OPTION 2 HYDRAULIC CEMENT UNDERLAY FOR USE WITH HIGH-BUILD COLORED EPOXY FINISH WHERE THE FINISH IS THE WEAR-LAYER.
 - A. Source Quality Control: The following products shall be obtained from same manufacturer and be fully coordinated and compatible with each other to result in a manufacturer's complete certified system:
 - 1. Underlay material
 - 2. Integral coloring agent
 - 3. Vapor Barrier/Primer System
 - B. Products:
 - 1. Ardex K 15 Self-leveling Underlayment
 - 2. Approved Equal: See Section 016000 "Product Requirements" for substitution Procedures.
 - C. Hydraulic Cement Underlay: Pre-proportioned, Polymer-modified, self-leveling, Portland cement product that can be applied in minimum uniform thickness of 3/8" inch and up to 1". The underlay shall be capable of fully bonding to the prepared substrate without delamination, shall exhibit flexural strength to limit cracking caused by movement and/or cracking of the substrate except at new control joints.

- 1. Cement Binder: ASTM C 150/C 150M, Portland cement, or hydraulic or blended hydraulic cement as defined by ASTM C 219.
- 2. Compressive Strength: Not less than 5500 psi at 28 days when tested according to ASTM C 109/C 109M.
- 3. Flexural Strength: 1200 psi at 28 days when tested according to ASTM C 78
- 4. Flow time: 10 minutes
- D. Aggregate: As recommended by manufacturer.
 - 1. Provide aggregate as recommended in writing by underlay manufacturer for underlay thickness required.
- E. Water: Potable and at a temperature within manufacturer's recommended range.

2.4 VAPOR BARRIER/PRIMER SYSTEM

- A. Fluid applied moisture control/primer system with integral or broadcast aggregate capable of fully and permanently bonding to existing concrete substrate and allowing for full and permanent bond of overlay materials. Must be compatible with overlay materials.
 - 1. Perm rate of: Less than or Equal to 0.10 when tested per ASTM E96

2.5 ACCESSORIES

- A. Patching Material: As recommended by manufacturer, trowlable cementitious patching compound capable of min 1/4" deep too full slab-depth patches, compatible with Vapor Barrier/Primer System and Hydraulic Cement Overlay
- B. Rigid Crack Filler: As recommended by manufacturer for existing substrate crack repair and for use at control and expansion joints where cracks are greater than 30 mils" in width, compatible with Vapor Barrier/Primer System and Hydraulic Cement Overlay.
- C. Flexible Sealing Compound: As recommended by manufacturer for existing substrate crack repair and for use under control and expansion joints, compatible with Vapor Barrier/Primer System and Hydraulic Cement Overlay.
- D. Semi-Rigid Epoxy Joint Filler, for use in new control joints, compatible with all finish system components.
 - 1. Color: As selected by Architect from Manufacturer's full range.
 - 2. Metzger/McGuire MM80 or approved equal
- E. Reinforcement: As recommended by manufacturer for existing substrate crack repair and for use at control and expansion joints and unique conditions requiring reinforcement. Reinforcement shall be fully non-corrosive.
- F. Metal Control Joints.
 - 1. Angle type, mechanically anchored to existing slab.
 - 2. Of highest duty rating available.

- 3. Fully non-corrosive as recommended by overlay manufacturer.
- 4. Semi-Rigid Epoxy Joint Filler, for use in new control joints, compatible with all finish system components.
 - a. Color: As selected by Architect from Manufacturer's full range.
 - b. Metzger/McGuire MM80 or approved equal
- 5. Use a single source, complete Control Joint system
 - a. Metzger/McGuire or approved equal
- G. Corrosion-Resistant Coating: Recommended in writing by manufacturer for treating any metal materials in substrate which will be in contact with overlay materials.
- H. Curing materials: As recommended by manufacturer.
 - 1. Moisture retaining cover of polyethylene plastic sheeting, 6mil minimum thickness.
 - 2. Potable water.
- I. Densifier: For use with Option 1 Overlay, as recommended by manufacturer to achieve maximum abrasion and impact resistance. Densifiers must be fully compatible with all other overlay and finish systems.
- J. Finish Material: See Section 033600 or 097420 as apply.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Manufacturer and Installer present, for conditions affecting performance of the Work.
 - 1. The Contractor shall provide the overlay manufacturer's written evaluation and certification of the surface preparation, indicating its suitability for application of the overlay as a condition of the manufacturer's provision of the Material Warranty.
 - 2. The Contractor shall provide the Contractor's own evaluation and certification of the surface preparation, indicating its suitability for application of the overlay as a condition of the Contractor's provision of the Installation and Workmanship Warranty.
- B. Proceed with application only after unsatisfactory conditions have been corrected.

3.2 SURFACE PREPARATION – GENERAL

A. Where product manufacturer's recommendations for surface preparation are given, they will be compared to the requirements of this specification and the most stringent will govern.

3.3 INITIAL SURFACE PREPARATION

A. Slab Scarification

- 1. Scarification shall occur over all areas of the existing slab showing evidence of deficiency including softness, spalling and delamination unless specifically prohibited in writing by the manufacturer of the overlay products.
- 2. Scarification shall also occur over areas of existing concrete where the existing elevation will prevent application of the overlay material at a thickness equal or greater than the required min. thickness of 3/8".
- 3. The scarification work shall consist of removing the designated concrete surface using mechanical scarifying equipment as specified.
- 4. The areas designated shall be scarified uniformly to the depth as determined in the field based on existing conditions. In areas not accessible to the scarifying equipment, power-driven hand tools will be permitted.
- 5. Power driven hand tools shall be used for removal around areas to remain in place.
- 6. A trial section on the existing surface will be designated by the Architect to demonstrate that the equipment, personnel and methods of operation are capable of producing results satisfactory to the Architect. The trial section will consist of approximately 30 sqft.
- 7. Once the settings for the equipment are established, they shall not be changed without the permission of the Architect. The removal shall be verified, as necessary, at least every 16 ft along the cutting path. If concrete is being removed below the desired depth, the equipment shall be reset or recalibrated.

B. Slab Shot and/or Abrasive Blasting

1. The entire existing concrete slab surface shall be subjected to shot-blasting and/or abrasive blast cleaning to remove any remaining weak concrete at the surface, including the micro-fractured concrete surface layer remaining as result of mechanical scarification and to thoroughly clean and roughen the existing concrete surface. Any areas determined by the Architect to be inaccessible to mechanical equipment shall be thoroughly blast cleaned with hand-held equipment. Upon completion of shot and or abrasive blasting the concrete surface shall be entirely free of all laitance, adhesive, residue and any other foreign material which could inhibit the bond of the Vapor Barrier/Primer System.

3.4 TESTING OF INITIAL SURFACE PREPARATION

A. Substrate Pull-Off Testing: Where mechanical scarification was used, surface pull-off testing will be required.

1. Initial Testing:

a. During start-up of the shot/abrasive blasting process, the Architect will evaluate the blast cleaning method. A trial area, minimum 50 square feet shall be established and blast cleaned. Six pull-off tests shall conducted. The average of the six tests shall be a minimum of 250 psi and each individual test shall have a minimum strength of 200 psi. If the criteria are not met, the Contractor shall adjust the blast cleaning method. Initial testing will be repeated until satisfactory results are attained.

b. Once an acceptable blasting method is established, it shall be continued for the balance of the work. The Contractor may, with the permission of the Architect, change the surface preparation method, in which case, additional initial testing will be required.

2. Progress Testing

a. After initial testing has been completed, the following testing frequency will be used. For each phase of not more than 1000 sq. ft., tests shall be conducted in three random locations. The average of the three tests shall be a minimum of 250 psi and each individual test shall have a minimum strength of 200 psi. In the case of a failing individual test or a failing average of three tests, the Architect will determine the area that requires additional surface preparation by the Contractor. Additional test locations will be determined by the Architect.

3.5 SLAB PATCH, JOINT AND CRACK INDENTIFCATION, REPAIR AND REINFORCEMENT

- A. After initial surface preparation, the slab surface shall be sound tested for any remaining loose, spalled and delaminating concrete, and shall be visually inspected for joints and cracks. Testing and identification of deficiencies shall be conducted by the Architect with the Contractor present.
- B. Identified areas of remaining deficient concrete shall be removed by chipping and bushing to sound concrete and shot and/or abrasive blasted to clean and roughen. Any exposed reinforcing steel or other embedded ferrous items shall be shot/abrasive blasted to bright metal and coated with a corrosion preventing coating. Existing concrete defining patch areas shall be surface saturated if required by patch material manufacture. Patch areas shall be filled using manufacturer's recommended patching material for application thickness required. Patch material shall be thoroughly consolidated. Patch surfaces shall be roughened with a wire brush prior to initial set of material, and patches shall be cured in strict accordance with patch material manufacturer's instructions.
- C. Identified joints and cracks shall be filled and/or reinforced using products and methods as recommended by overlay manufacture.

3.6 FINAL SURFACE PREPARATION

- A. Final surface preparation shall include the cleaning of all dust, debris and concrete fines from the existing slab surface and from all adjacent areas to avoid cross contamination.
- B. All dust, debris and concrete fines resulting from the surface preparation shall be confined and shall be immediately and thoroughly removed from all areas of accumulation. If concrete placement does not follow immediately after the final cleaning, the area shall be carefully protected with wall-anchored white polyethylene sheeting.

3.7 APPLICATION

- A. General: Mix and apply overlay components according to manufacturer's written instructions.
 - 1. Close areas to traffic during overlay application and for time period after application recommended in writing by manufacturer.
 - 2. Coordinate application of components to provide optimum adhesion to substrate and between coats if multiple coats are required.
 - 3. At substrate expansion, isolation, and other joints, allow joint of same width to continue through overlay.
- B. Apply Vapor Barrier/Primer system over prepared substrate at manufacturer's recommended spreading rate and in strict accordance with the manufacturer's application instructions.
- C. After Vapor Barrier/Primer system is fully cured, layout control joints according to the phase plan and install metal control joint and accessories according to manufacturer's instructions, and per type indicated on phase drawing. Control joints shall be installed over all existing control joints and where additionally indicated as shown on phase plan.
 - 1. Control joint types:
 - a. Type A Single angle: For limited use where detailed.
 - b. Type B Double angle: Typical, for use in all applications unless otherwise noted.
- D. Apply overlay to produce uniform, level surface in strict accordance with manufacturer's application instructions.
 - 1. Minimum thickness of application: 3/8"
- E. Cure overlay according to manufacturer's instructions. Prevent contamination during application and curing processes.
- F. Lightly grind/polish overlay surface to expose aggregate (OPTION 1 Only).
- G. Grind and polish top edge of control joint metal accessories flush with finished overlay surface (OPTION 1) and flush with proposed surface elevation of Epoxy Floor System (OPTION 2).
- H. Do not install densifiers, finish products or coatings over overlay until after time period recommended in writing by overlay manufacturer.
- I. Apply densifiers or other products recommended by overlay AND FINISH SYSTEM manufacturer at rate required, and only after the overlay application has been tested/inspected and accepted.

3.8 TESTING AND INSPECTING OF APPLICATION

- A. Material, Bond and Application Quality Testing:
 - 1. Material Sampling and Testing: During placement of the Mock-up and at a frequency of one sample per phase thereafter during application of the balance of the overlay material, the overlay material shall be sampled and tested according to the following:
 - a. ASTM C109 / C109M Standard Test Method for Compressive Strength of Hydraulic Cement Mortars (Using 2-in. or [50-mm] Cube Specimens)
 - b. ASTM C348-14 Standard Test Method for Flexural Strength of Hydraulic-Cement Mortars
 - 2. Mock-up and Progress Overlay Visual Inspection: During application of the mock-up and of the balance of the overlay material, the Owner's agency will visually inspect the overlay for excessive cracking.
 - 3. Mock-up Overlay Pull-Off Testing: During start-up of the overlay application process, the Owner's agency will test the overlay bond to the substrate. A mock-up shall be prepared per article 1.7 of this section and six pull-off tests shall conducted. Upon final set of the overlay material in the mock-up area, tests shall be conducted at six random locations. The average of the six tests shall be a minimum of 250 psi and each individual test shall have a minimum strength of 200 psi. Testing shall be according to the following:
 - a. ASTM C 1583Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)
 - 4. Progress Overlay Pull-Off Testing: During application of the balance of the overlay material, the Owner's agency will test the overlay bond to the substrate. Upon final set of the overlay material in a given phase area, a minimum of three tests shall be conducted at random locations. The average of the three tests shall be a minimum of 250 psi and each individual test shall have a minimum strength of 200 psi. Testing shall be according to the following:
 - a. ASTM C 1583 Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)
 - 5. Progress Overlay Sound Testing: During application of the balance of the overlay material, the Owner's agency will sound test the overlay for deficient bond, delamination and/or voids. Upon final set of the overlay material in each phase, the area shall be sound tested using the chain drag method. Deficiencies shall be marked.
 - 6. Mock-up and Progress Overlay Visual Inspection: During application of the mock-up and of the balance of the overlay material, the Owner's agency will visually inspect the overlay for excessive cracking.

B. Acceptance:

- 1. Application of the overlay material shall be evaluated and accepted by phase, based on the testing and inspection data applicable to a given phase.
 - a. Material not meeting the minimum performance requirements as evaluated by tests in articles 3.8.A.1-4 above may be rejected at the Architect's discretion. In this case, at the Contractor's expense, all material shall be removed, the substrate reprepared per articles 3.3.B and 3.6 of this Section, and new material shall be installed and shall be subject to the same battery of tests indicated in article 3.8.
 - b. Material not meeting the minimum performance requirements as evaluated by the test in article 3.8.A.5 above will be rejected. In this case, at the Contractor's expense, identified deficient material shall be removed, the exposed substrate reprepared per articles 3.3.B and 3.6 of this Section, and new material shall be installed.

3.9 PROTECTION

A. Protect overlay from contamination, staining, concentrated and rolling loads for remainder of construction period.

END OF SECTION 035416.1

SECTION 087200 - THRESHOLDS

PART 1 GENERAL

1.01 SUMMARY

A. Section Includes: Commercial Heavy Duty Thresholds.

1.02 REFERENCES

- A. American National Standards Institute/Builders Hardware Manufacturers Association (ANSI/BHMA):
 - 1. ANSI/BHMA A156.18: Materials and Finishes.
 - 2. ANSI/BHMA A156.21 Thresholds.
- B. Underwriters Laboratories, Inc. (UL):
 - 1. UL 410 Slip Resistance for Floor Surface Materials.
- C. International Code Council (ICC):
 - 1. ICC/ANSI A117.1 Accessible and Usable Buildings and Facilities.

1.03 SYSTEM DESCRIPTION

- A. Design Requirements: Provide threshold and seal products which have been manufactured, fabricated and installed to meet the following design criteria:
 - 1. Compliant with ADA standards.

1.04 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions.
- B. Shop Drawings: Provide drawings indicating required component locations, interface with adjacent materials, installation, anchorage, fastening and similar information.
- C. Samples: Submit one each of manufacturer's standard selection samples.
- D. Quality Assurance/Control Submittals: Submit the following:
 - 1. Test Reports: Upon request, submit Durability test reports from recognized testing laboratory.
 - 2. Certificates: Submit manufacturer's certificate that products meet or exceed specified requirements.
- E. Closeout Submittals: Submit the following:
 - 1. Warranty documents specified herein.

SECTION 087200 - THRESHOLDS

1.05 DELIVERY, STORAGE & HANDLING

- A. General: Comply with Section 016000 "Product Requirements".
- B. Delivery: Deliver materials in manufacturer's original, unopened, undamaged containers with identification labels intact.
- C. Storage and Protection: Store materials protected from exposure to harmful environmental conditions and at temperature and humidity conditions recommended by the manufacturer.

1.06 WARRANTY

- A. Project Warranty: Refer to Conditions of the Contract for project warranty provisions.
- B. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty document executed by authorized company official. Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.
 - 1. Warranty Period (Standard Products): 3 years against defects in materials or workmanship, beginning with Date of Substantial Completion.

PART 2 PRODUCTS

2.01 THRESHOLDS

- A. Products/Systems: Thresholds, including the following:
 - 1. Half Saddle Thresholds:
 - a. Type: Commercial, Heavy Duty
 - b. Material: Extruded Bronze
 - c. Finish: Oil rubbed
 - d. Manufacturer Model Number: For 1/2" offset, depending on final depth of floor overlay system,
 - 1) Type 1: Saddle Threshold, ½" offset, 6" wide
 - 2) Type 2: Saddle Threshold, ½" offset, 4" wide
 - e. Manufacturer Model Number: For 1/4" offset, depending on final depth of floor overlay system,
 - 1) Type 1: Saddle Threshold, 1/4" offset, 6" wide
 - 2) Type 2: Saddle Threshold, 1/4" offset, 4" wide
- B. Approved Equal: See Section 016000 "Product Requirements" for substitution procedures.

SECTION 087200 - THRESHOLDS

PART 3 EXECUTION

3.01 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the threshold manufacturer for handling and installation.

3.02 EXAMINATION

- A. Site Verification of Conditions:
 - 1. Verify that site conditions are acceptable for installation of thresholds.
 - a. Examine doors and frames for compliance with requirements for door and frame manufacturer's installation tolerances, wall and floor construction and other conditions affecting performance.
 - 2. Verify door & frame sizes as they differ throughout the project.
 - 3. Do not proceed with installation of thresholds until unacceptable conditions are corrected.

3.03 INSTALLATION

- A. Mounting Location: Comply with drawings and approved shop drawings.
- B. Adjust and reinforce attachment substrates as necessary for proper installation and floor level alignments.
- C. Drill and countersink units that are not factory prepared for anchorage fasteners. Space fasteners and anchors according to industry standards.

3.04 ADJUSTING

A. Perform adjustments required to ensure that thresholds function and alignments in compliance with manufacturer's performance criteria prior to acceptance by Owner.

3.05 CLEANING

A. Remove any protective films and clean components as necessary following manufacturer's recommended procedures.

3.06 PROTECTION

A. Protect installed work from damage due to subsequent construction activity on the site.

END OF SECTION 087200

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Continuous blocking for Gypsum Board
 - 2. Interior Impact Resistant Gypsum Board
 - 3. Metal reglets and trims for Gypsum Board panel joints and corners
 - 4. Finishes for new and existing Gypsum Board surfaces
- B. Related Requirements:
 - 1. Section 096513.1 "Custom Plastic Base"

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples: For the following products:
 - 1. Metal Reglets and Trims: Full-size Sample in 12-inch- (300-mm-) long length for each type indicated.

1.4 QUALITY ASSURANCE

- A. Mockups: Build mockups of at least 8 linear feet to demonstrate aesthetic effects and to set quality standards for materials and execution.
 - 1. Mock-up shall include the following:
 - a. Finished panel joint between new and existing gypsum board.
 - b. Surface finish including paint over new and existing gypsum board.
 - 1) Surface texture and paint color and sheen shall be reviewed for exact match to existing wall surface.
 - 2. Simulate finished lighting conditions for review of mockups.
 - 3. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE AND HANDLING

A. Store materials inside under cover and keep them dry and protected against weather, condensation, direct sunlight, construction traffic, and other potential causes of damage. Stack panels flat and supported on risers on a flat platform to prevent sagging.

1.6 FIELD CONDITIONS

- A. Environmental Limitations: Comply with ASTM C 840 requirements or gypsum board manufacturer's written instructions, whichever are more stringent.
- B. Do not install paper-faced gypsum panels until installation areas are enclosed and conditioned.
- C. Do not install panels that are wet, moisture damaged, and mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

PART 2 - PRODUCTS

2.1 GYPSUM BOARD, GENERAL

- A. Size: Provide maximum lengths and widths available that will minimize joints in each area and that correspond with support system indicated.
- B. Impact-Resistant Gypsum Board: ASTM C 1396/C 1396M gypsum board, tested according to ASTM C 1629/C 1629M.
 - 1. Core: 5/8 inch (15.9 mm), Type X.
 - 2. Surface Abrasion: ASTM C 1629/C 1629M, meets or exceeds Level 2 requirements.
 - 3. Indentation: ASTM C 1629/C 1629M, meets or exceeds Level 2 requirements.
 - 4. Soft-Body Impact: ASTM C 1629/C 1629M, meets or exceeds Level 2 requirements.
 - 5. Hard-Body Impact: ASTM C 1629/C 1629M, meets or exceeds Level 2 requirements according to test in Annex A1.
 - 6. Long Edges: Tapered.
 - 7. Mold Resistance: ASTM D 3273, score of 10 as rated according to ASTM D 3274.

2.2 TRIM ACCESSORIES

- A. Interior Trim: ASTM C 1047.
 - 1. Material: Heavy duty vinyl or galvanized steel
 - 2. Shapes:
 - a. Cornerbead.
 - b. Expansion (control) Joint/Joint Reglet

2.3 JOINT TREATMENT MATERIALS

- A. General: Comply with ASTM C 475/C 475M.
- B. Joint Tape:
 - 1. Interior Gypsum Board: Paper.
- C. Joint Compound for Interior Gypsum Board: For each coat, use formulation that is compatible with other compounds applied on previous or for successive coats.
 - 1. Prefilling: At open joints, rounded or beveled panel edges, and damaged surface areas, use setting-type taping compound.
 - 2. Embedding and First Coat: For embedding tape and first coat on joints, fasteners, and trim flanges, use setting type compound.
 - 3. Fill Coat: For second coat, use setting-type, sandable topping compound.
 - 4. Finish Coat: For third coat, use setting-type, sandable topping compound.

2.4 PRIMER AND PAINT

- A. Primer: Commercial high-build interior latex primer
- B. Paint: of type, color and sheen to exactly match existing paint used in facility.

2.5 AUXILIARY MATERIALS

- A. Continuous Blocking: Contractor may use wood or steel as indicated below:
 - 1. Bottom edge: 2X8, fire-retardant-treated wood
 - 2. Top edge: 2X4, fire retardant treated wood
 - 3. Bottom edge: 800S200-43 steel stud blocking
 - 4. Top edge: 400S200-43 steel stud blocking
- B. Steel Drill Screws: ASTM C 1002 unless otherwise indicated.
 - 1. Use screws complying with ASTM C 954 for fastening panels to steel members from 0.033 to 0.112 inch (0.84 to 2.84 mm) thick.
- C. Thermal Insulation: Match existing
- D. Vapor Retarder: 10mil clear polyethylene sheet

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas and substrates with Installer present, for compliance with requirements and other conditions affecting performance of the Work.

- B. Examine panels before installation. Reject panels that are wet, moisture damaged, and mold damaged.
- C. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 APPLYING IMPACT RESISTENT GYPSUM BOARD PANELS

- A. Comply with ASTM C 840.
- B. Install interior gypsum board in the following locations:
 - 1. Along full perimeter of project area, replacing lower 24" of existing gypsum board removed under Section 024119 "Selective Demolition".
- C. Single-Layer Application:
 - 1. On partitions/walls, apply gypsum panels horizontally, perpendicular to framing in longest lengths possible to minimize vertical joints.
 - 2. Fastening Methods: Apply gypsum panels to supports with steel drill screws.
- D. Bottom edge continuous blocking: Install continuous blocking along bottom edges of new gypsum board panels on-flat with bottom edge of backing members in contact with existing wall bottom plate/track. Line and adjust existing stud face locations so that blocking members, when installed flush with outside face of existing studs are flat and true with each other.
 - 1. Tolerance: ¼" within 10 linear feet
- E. Top edge continuous blocking: Install continuous blocking on-flat with blocking members centered on horizontal joint between new and existing gypsum board panels.
- F. Install panels with face side out. Butt panels together for a light contact at edges and ends with not more than 1/16 inch (1.5 mm) of open space between panels. Do not force into place.
- G. Locate horizontal edges over blocking and vertical edges over studs. Do not place tapered edges against cut edges or ends. Do not make joints at corners of openings.
 - 1. All gypsum panel edges shall be fully supported. Install additional blocking where unique conditions prevent edges from aligning with new blocking or existing studs.
- H. Form horizontal joint between new and existing gypsum board panels with space between edges of adjoining panels as required by profile of joint reglet. Remove fasters from existing gypsum board as required to install control joint/reglet, install new fasteners and patch back all resulting holes and indentations in preparation for finishing of existing gypsum board edge.

3.3 INSTALLING TRIM ACCESSORIES

A. General: For trim with back flanges intended for fasteners, attach to framing with same fasteners used for panels. Otherwise, attach trim according to manufacturer's written instructions.

- B. Trim and Reglets: Install in the following locations:
 - 1. Cornerbead: Use at outside corners.
 - 2. Horizontal Joint Reglet: Use continuous double flanged Control Joint type reglet for horizontal joint between new and existing gypsum board panels.

3.4 FINISHING GYPSUM BOARD

- A. General: Treat gypsum board joints, interior angles, edge trim, control joints, penetrations, fastener heads, surface defects, and elsewhere as required to prepare gypsum board surfaces for decoration. Promptly remove residual joint compound from adjacent surfaces.
- B. Prefill open joints, rounded or beveled edges, and damaged surface areas.
- C. Apply joint tape over gypsum board joints, except for trim products specifically indicated as not intended to receive tape.
- D. Gypsum Board Finish Levels: Finish panels to levels indicated below and according to ASTM C 840:
 - 1. Level 2: In locations which will be concealed upon application of Custom Plastic Base.
 - 2. Level 4: At all other locations.
- E. Glass-Mat Faced Panels: Impact Resistant Gypsum Board panels are typically glass matt faced, exhibiting more texture than standard gypsum board. Apply skim coat as required to match finish surface textures of new and existing gypsum board panels.
- F. Finishing existing gypsum board edge at new control joint: For the full length of the new joint, prepare the edge of the existing gypsum board by roughening and application of a skim-coat as required to match the plane of the new gypsum board panel below. Prime prepared edge and paint.

3.5 APPLYING TEXTURE FINISHES

- A. Where existing wall surface exhibits texture, apply texture to new adjacent gypsum wall board to match.
- B. Surface Preparation and Primer: Prepare and apply primer to gypsum panels and other surfaces receiving texture finishes. Apply primer to surfaces that are clean, dry, and smooth.
- C. Texture Finish Application: Mix and apply finish using powered spray equipment, to produce a uniform texture matching approved mockup and free of starved spots or other evidence of thin application or of application patterns.
- D. Prevent texture finishes from coming into contact with surfaces not indicated to receive texture finish by covering them with masking agents, polyethylene film, or other means. If, despite these precautions, texture finishes contact these surfaces, immediately remove droppings and overspray to prevent damage according to texture-finish manufacturer's written instructions.

3.6 PROTECTION

- A. Protect all adjacent surfaces including floor surfaces from drywall compound, and finishes and promptly remove from surfaces when contamination occurs. Repair surfaces stained, marred, or otherwise damaged during drywall application.
- B. Protect installed products from damage from weather, condensation, direct sunlight, construction, and other causes during remainder of the construction period.
- C. Remove and replace panels that are wet, moisture damaged, and mold damaged.
 - 1. Indications that panels are wet or moisture damaged include, but are not limited to, discoloration, sagging, or irregular shape.
 - 2. Indications that panels are mold damaged include, but are not limited to, fuzzy or splotchy surface contamination and discoloration.

END OF SECTION 092900

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section Includes:
 - 1. Exposed fasteners for Custom Plastic Base
 - 2. Custom plastic base

1.3 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Samples for Initial Selection: Representative of manufacturer's full range of available colors.
- C. Samples for Verification: For each type of product indicated and for each color and texture, at size indicated in drawings and minimum 12" long.

1.4 QUALITY ASSURANCE

- A. Mockups: Build mockup to verify selections made under Sample submittals and to demonstrate aesthetic effects and set quality standards for materials and execution.
 - 1. Mock-up shall be a minimum of 5' in length and include one outside corner.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store plastic products and installation materials in dry spaces protected from the weather, with ambient temperatures maintained within range recommended by manufacturer, but not less than 50 deg F (10 deg C) or more than 90 deg F (32 deg C).

1.6 FIELD CONDITIONS

- A. Maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F or more than 95 deg F in spaces to receive resilient products during the following time periods:
 - 1. 48 hours before installation.
 - 2. During installation.
 - 3. 48 hours after installation.

- B. After installation and until Substantial Completion, maintain ambient temperatures within range recommended by manufacturer, but not less than 55 deg F (13 deg C) or more than 95 deg F (35 deg C).
- C. Install plastic products after other finishing operations, including painting, have been completed.

PART 2 - PRODUCTS

- 2.1 High Density Polyethylene Plastic
 - A. Material Properties:
 - 1. Density 59.88 lbs/ft cubed ASTM D-792
 - 2. Hardness 67 ASTM D-2240
 - B. Thickness: 3/4"
 - C. Edges: All exposed edges including vertical edges at joints shall have 1/8" radius.
 - D. Height: As indicated on Drawings.
 - E. Lengths: Install in longest lengths practicable, 10' min.
 - F. Outside Corners: Job formed
 - G. Inside Corners: Job formed
 - H. Colors: As selected by Architect from full range of industry colors.

2.2 INSTALLATION MATERIALS

- A. Continuous Blocking: Custom Plastic Base must be installed over new gypsum wall board supported by new continuous blocking. See Section 092900 "Gypsum Board" for continuous blocking requirements.
- B. Exposed Fasteners:
 - 1. Bronze; wide, low profile head; torx type, #12 of length to fully penetrate selected blocking material.
 - 2. Approved Equal: See Section 016000 "Product Requirements" for substitution procedures.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine substrates, with Installer present, for compliance with requirements and other conditions affecting performance of the Work.
 - 1. Verify that finishes of substrates comply with tolerances and other requirements specified in other Sections and that substrates are free of cracks, ridges, depressions, scale, and foreign deposits that might interfere with installation of plastic products.
- B. Proceed with installation only after unsatisfactory conditions have been corrected.
 - 1. Installation of plastic products indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Do not install plastic products until they are the same temperature as the space where they are to be installed.
 - 1. At least 48 hours in advance of installation, move plastic products and installation materials into spaces where they will be installed.
- B. Immediately before installation, sweep and vacuum clean substrates to be covered by resilient products.

3.3 CUSTOM PLASTIC BASE INSTALLATION

- A. Install base on walls, pilasters and other permanent fixtures in rooms and areas where base is required.
- B. Install custom base both level and parallel to the adjacent floor plane to the greatest extent possible. Bottom of base may be gapped from floor up to 3/8" maximum to allow "splitting the difference" where the floor plane is not level.
- C. At areas where the floor plane is significantly out of level, cope bottom edge of base to maintain level along top of base.
- D. Install individual sections of custom plastic base in equal lengths, coplanar with each other with consistent 3/16" gaps at butt joints and with tops of adjacent pieces aligned.

E. Job-Formed Corners:

1. Outside Corners: Use straight pieces of maximum lengths possible. Lap ends such that end cut of lapping section is flush with outside face of adjacent section. Leave a 3/16" gap at joint.

- 2. Inside Corners: Use straight pieces of maximum lengths possible. Lap ends such that end cut of lapping section is flush with back face of adjacent section. Tightly fit adjoining sections leaving no gap.
- F. Fastening: Fasten base through new gypsum wall board to continuous blocking or studs using two fasteners spaced 5" apart vertically, centered on height of face of base. Install fasteners at 24" OC and on both faces of adjoining base sections at inside and outside corners a distance 2-1/2" from corner. Prior to installation of any material, verify location of (e) bottom plate and new blocking along full length of installation throughout facility to ensure that specified fastener pattern will result in full embedment of all fasteners.

3.4 CLEANING AND PROTECTION

- A. Comply with manufacturer's written instructions for cleaning and protecting plastic products.
- B. Perform the following operations immediately after completing resilient-product installation:
 - 1. Clean all surfaces
 - 2. Remove blemishes from exposed surfaces.
- C. Protect plastic products from mars, marks, indentations, and other damage from construction operations and placement of equipment and fixtures during remainder of construction period.

END OF SECTION 096513.1

PART 1 GENERAL

1.1 SUMMARY

- Section includes: A.
 - 1. Moisture vapor emission testing.
 - 2. Surface preparation.
 - 3. Joint treatment.
 - 4. Furnishing and installation of three coat epoxy flooring system
 - 5. Quality testing

B. **Related Sections:**

- Section 013000 "Administrative Requirements" 1.
 - a. For mandatory pre-mobilization coordination meeting.
- 2. Section 035416.1 – "Hydraulic Cement Overlay" (Underlay)
 - a. Overlays on concrete slabs on or below grade shall be installed over an effective moisture vapor barrier.
 - b. Overlays shall be fully cured and certified by overlay manufacturer as suitably cured to receive epoxy flooring system, be structurally sound and have a smooth, uniform surface.
 - c. Surface shall be straight and level with the permissible degree of tolerance of maximum 1/4" in 10'-0" in any direction.
 - d. No curing compounds or surface contaminants shall be used in placing new overlays.

1.2 DEFINITIONS

"Phase": See DEFINITIONS under Section 035416.1 "Hydraulic Cement Overlay" A.

1.3 SYSTEM DESCRIPTION

- The flooring system shall consist of a primer coat, intermediate build coat and a A. finish coat. Total dry film thickness shall be 30-34 mils.
- B. Finished flooring system shall have the following performance characteristics:
 - 1. Gloss (60 degrees): 50-60
 - 2. Hardness (Sward): 30
 - 3. Tabor abrasion: (1000 gm load, 1000 cycles, CS-17 wheel): 18 mg loss.
 - Tensile Strength, psi (ASTM D-638): 6,230
 Ultimate Elongation, % (ASTM D-638): 11

 - 6. Compressive Yield Strength, psi (ASTM D-695): 9,850
 - 7. Ultimate Compressive Strength, psi (ASTM D-695): 19,501
 - 8. Ultimate Flexural Strength, psi (ASTM D-790): 9,680
 - 9. Bond Strength to Concrete (ACI 503.4-2.3.2.2) concrete fails before loss of bond

- C. Chemical Resistance: (ASTM D-1308 7-day exposure) Unaffected by the following:
 - 1. Brake fluid
 - 2. Skydrol B-4
 - 3. Gasoline
 - 4. Hydraulic fluid #83282
 - 5. Mineral spirits
 - 6. Xylene
 - 7. 50% Sodium Hydroxide
 - 8. 25% Hydrochloric Acid
 - 9. 25% Sulphuric Acid

1.4 SUBMITTALS

- A. Submit manufacturer's product data.
- B. Submit manufacturer's project specific written certification that the epoxy flooring system is fully compatible with the substrate to which it will be applied and suitable for the intended use.
- C. Submit manufacturer's samples for selection showing color choices and texture.
- D. Prior to commencing work, installer shall prepare two 4' x 4' samples onsite of the resinous flooring chosen for the project showing actual color, thickness and texture. These samples shall serve as a basis for comparison throughout the duration of the work.

1.5 PREINSTALLATION MEETINGS

- A. Pre-Mobilization Coordination Meeting: See Section 013000 "Administrative Requirements".
- B. Preinstallationn Conference: Conduct conference at Project site with Owner, Architect, Installer General Contractor and Manufacturer's representative present. Allow a minimum of two hours.

1.6 MOCK-UP

A. Mock-up: Upon completion of substrate preparation, prepare a mock-up incorporating all layers of the epoxy flooring system. The Mock-up shall be installed where directed by the Architect, and shall cover a full phase area. The Mock-up shall be installed using methods and sequences identical to those intended for use in installation of the balance of the epoxy flooring system.

- B. Acceptance: The Mock-up shall be subject to all quality control tests identified under article 3.4 of this Section. Mock-up installation shall be observed and evaluated by the Architect and epoxy flooring manufacturer.
 - 1. Contractor shall provide the epoxy flooring manufacturer's written evaluation and certification of the Mock-up, indicating the quality of the material and workmanship as a condition of the manufacturer's provision of the Material Warranty.
 - 2. The Owner's testing agency shall conduct all tests indicated and provide written test data to the Architect and Owner for review.
 - 3. Work to install the balance of the epoxy flooring system shall not proceed until the manufacturer's written evaluation and all test data has been reviewed and accepted in writing by the Owner and Architect.
 - 4. Should the Mock-up not be accepted due to observation and/or test identified material failure or unacceptable workmanship, at the Contractor's expense, all mock-up material shall be removed, the substrate re-prepared and a new Mock-up shall be installed for review and acceptance.
 - 5. The Mock-up may be incorporated into the work if accepted by the Owner and Architect.

1.7 QUALITY ASSURANCE

- A. All resin material used in this system shall be manufactured by a single manufacturer to ensure compatibility and proper bonding.
- B. All work shall be performed in strict accordance with the manufacturer's written instructions.
- C. Applicator must have a minimum of 3 years experience in installing polymeric flooring systems and be certified by the manufacturer.
- D. Testing Agency Qualifications: An agency acceptable to the Owner and experienced in conducting the following tests:
 - 1. ACI 503 Field Test for Surface Soundness and Adhesion

1.8 DELIVERY, STORAGE AND HANDLING

A. All material shall be delivered to the jobsite in unopened containers clearly labeled by the manufacturer and stored in a dry location at a minimum of 65 degrees F.

1.9 WARRANTY

- A. Manufacturer shall guarantee that his materials are free from defects and comply with published specifications.
- B. Applicator shall warranty against faulty workmanship and against product application failure including delamination, discoloration, clouding or blistering.
 - 1. Term of Warranty: 5 years from date of substantial completion.

PART 2 PRODUCTS

2.1 MANUFACTURERS

- A. Resin materials shall be supplied by Arizona Polymer Flooring Inc., Glendale, AZ, (800)562-4921, and as distributed by Industrial Coatings & Sealants, 12521 Evergreen Drive #B, Mukilteo, WA (425)742-5693.
- B. Approved Equal: See Section 016000 "Product Requirements" for substitution procedures.

2.2 MATERIALS

- A. Primer: 100 percent solids amine-cured epoxy
- B. Intermediate Build Coat: 100 percent solids amine-cured epoxy.
- C. Finish Coat: 90 percent volume solids, three-component, aliphatic chemical resistant polyurethane.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verification of Conditions:
 - 1. Inspect surfaces to receive floor system.
 - 2. Conduct calcium chloride moisture vapor emission testing according to ASTM 1869-04. If test reading is above three pounds, consult Architect and Manufacturer before proceeding.
 - 3. Before starting work, report in writing to the Architect and manufacturer any unsatisfactory conditions. Work may not proceed until unsatisfactory conditions have been corrected to Architect's and manufacturer's satisfaction.
 - 4. Application of any material shall signify that surfaces have been inspected and are satisfactory.

3.2 SURFACE PREPARATION

A. Surfaces to receive resinous flooring system shall be over a new installed polymer based over/underlayment system compatible with the APF epoxy system (see Section 035416.1). All surfaces must be clean and dry prior to resinous flooring installation.

3.3 INSTALLATION

- A. Allow sufficient time for the installation of the flooring system. At no time shall the speed of project completion be allowed to detrimentally effect the application.
- B. Provide sufficient light, power, heat and working conditions to permit proper application of the materials. Substrate temperature shall be at a minimum of 50°F during application and for 48 hours thereafter.

- C. Mechanically clean and fill all joints and cracks with Epoxy 300 Flex Paste according to manufacturer's instructions. Allow to cure. Sand smooth, if necessary.
- D. Prime prepared substrate with Epoxy 400 with ColorChrome pigment at 200-250 sq. ft. per gallon. Allow to cure overnight before proceeding.
- E. Apply build coat of Epoxy 400 with ColorChrome pigment at 80 sq. ft. per gallon. Allow to cure overnight before proceeding.
- F. Apply finish coat of Polyurethane 325 at 350-400 sq. ft. per gallon. It is very important to maintain a "wet edge" throughout installation to minimize roller lines. It is also very important to achieve a uniform application rate. Heavier films will be glossier, thinner applications will be flatter.

3.4 TESTING AND INSPECTING OF APPLICATION

- A. Installer shall measure the thickness of the system as the work progresses at a rate of not less than three measurements per phase. The Owner's agency shall observe and record measurements. Areas found not to meet the required thickness shall receive additional material until desired thickness is attained.
- B. Mock-up Epoxy Pull-Off Testing: During start-up of the epoxy floor application process, the Owner's agency will test the epoxy bond to the substrate. A mock-up shall be prepared per article 1.4 of this section and six pull-off tests shall conducted. Upon final set of the epoxy flooring system in the mock-up area, tests shall be conducted at six random locations. The average of the six tests shall be a minimum of 250 psi and each individual test shall have a minimum strength of 200 psi. Testing shall be according to the following:
 - 1. ACI 503 Field Test for Surface Soundness and Adhesion OR
 - ASTM C 1583 Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)
 At Owner's Agency's option.
- C. Progress Epoxy Pull-Off Testing: During application of the balance of the epoxy floor material, the Owner's agency will test the epoxy bond to the substrate. Upon final set of the epoxy material in a given phase, a minimum of three tests shall be conducted at random locations. The average of the three tests shall be a minimum of 250 psi and each individual test shall have a minimum strength of 200 psi. Testing shall be according to the following:
 - 1. ACI 503 Field Test for Surface Soundness and Adhesion

OR

 ASTM C 1583 Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension (Pull-off Method)

At Owner's Agency's option.

D. Acceptance: Application of the epoxy material shall be evaluated and accepted by phase, based on the testing data applicable to a given phase. Material not meeting the minimum requirements as evaluated by tests in articles 3.4.A, B and C above may be rejected at the Architect's discretion. In this case, at the Contractor's expense, all material shall be removed, the substrate re-prepared and new material shall be installed and shall be subject to the same battery of tests indicated in article 3.4.

3.5 PROTECTION

A. Installation areas must be kept free from traffic and other trades during the application procedure and cure time.

3.6 MAINTENANCE

A. Floor should be cleaned with ammonia and water or a mild, non-filming detergent. For difficult stains, paint thinner may be used without harming the finish.

END OF SECTION 097420