



# **Anchorage School District**

## **STELLER SECONDARY SCHOOL SECURE ENTRY**

**ITB 2025-810  
ASD PROJECT No. 845015**

**DATE ISSUED: April 3, 2025**

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INVITATION TO BID (ITB) NUMBER: 2025 - 810  
Steller Secondary School Secure Entry

Sealed bids will be received in accordance with the time schedule shown below by the Anchorage School District, Purchasing Department, located at 4919 Van Buren Street Anchorage, Alaska 99517 for **Steller Secondary School Secure Entry** per the attached Instructions to Bidders, General Conditions, Technical Specifications, Drawings and Bid Form.

ESTIMATED CONSTRUCTION COST: Between \$100,000 - \$500,000

On-Site Visit	April 10, 2025 at 3:30 p.m. Local Time
Pre-Bid Conference:	April 11, 2025 at 11:00 a.m. Local Time
Bid Opening:	April 24, 2025 at 2:00 p.m. Local Time

At the above indicated time, the bids will be opened publicly and read. Bids received by the Purchasing Department after the time fixed for opening of the bids will not be considered. Time of receipt will be as determined by the time stamp at the Purchasing Department.

DOCUMENTS:

Prospective bidders may obtain copies of bidding documents at the Anchorage School District website <http://www.asdk12.org/depts/purchasing/PurchasingBids.aspx> Only electronic versions of this ITB are issued.

A copy of the current plan holder's list can be viewed at:  
[http://apps.asdk12.org/depts/purchasing/meeting/Plan\\_Holders/2025/810.xlsx](http://apps.asdk12.org/depts/purchasing/meeting/Plan_Holders/2025/810.xlsx)

NOTICE TO BIDDERS:

A bid bond in the amount of five (5%) percent of the total amount of the base bid will be required (**cash, personal or business checks are unacceptable**). The successful Contractor shall be required to furnish 100 percent performance and payment bonds.

The Anchorage School District reserves the right to reject any and all bids, and to waive any informalities or irregularities in bidding procedures.

ON-SITE VISIT AND PRE-BID CONFERENCE:

An On-Site Visit will be held on April 10, 2025 at 3:30 p.m. Local Time at Steller Secondary, 2508 Blueberry Rd., Anchorage, Alaska 99503. Please meet at the Front Office.

A Pre-Bid Conference will be held April 11, 2025 at 2:00 p.m. Local Time at Anchorage School District, Purchasing Department, located at 4919 Van Buren Street Anchorage, Alaska 99517. Prospective Bidders who wish to participate by teleconference may participate by calling (907) 742-6750. The line will be available approximately 5 minutes prior the conference start time.

All Bidders are encouraged to attend the On-Site Visit and Pre-Bid Conference. Major sub-bidders are also encouraged to attend.

The Anchorage School District is committed to providing reasonable accommodations, according to applicable state and federal laws, to all individuals with a qualifying disability. If you require a reasonable accommodation in order to participate in this or any other district process, please contact the Anchorage School District's Compliance/Equal Employment Opportunity Office at (907) 742-4132.

END OF SECTION

## INSTRUCTIONS TO BIDDERS

## PART 1 GENERAL INFORMATION

- 1.01 Refer to the Invitation to Bid for information relating to time, date and place for receipt of bids and other pertinent bidding information.
- 1.02 Anchorage School Board Policy 3515.5 prohibits a contractor whose employees or agents may have direct or incidental contact with Anchorage School District (the District) students from sending any employee or agent to district property who has been convicted of a sex offense under federal law or the law of any state and who is required to register as a sex offender under Alaska law or by court order, or who has been convicted of child kidnapping under federal law or the law of any state and who is required under Alaska law or court order to register on the Alaska Department of Public Safety Sex Offender/Child Kidnapper Central Registry. Board Policy 3515.5 requires contractors to certify in writing the contractor's knowledge of and compliance with Board Policy 3515.5. **Prior to executing a contract** for this project, the selected Contractor shall verify that no employee or agent who will be on district property is registered as a sex offender or child kidnapper in Alaska [Alaska Department of Public Safety "Sex Offender/Child Kidnapper Registry"] or in any other state. In addition, the contractor shall certify that, to its knowledge, no employee or agent is a convicted sex offender or child kidnapper. The required forms of certification are included in the bid documents.
- 1.03 LICENSE REQUIREMENTS
- A. The bidder shall include on the bid Form his current Business License number and expiration date from the State of Alaska authorizing him to engage in business to operate as a Business, Specialty or General Contractor, as well as his Federal Tax Identification number.
- B. The bidder shall provide a copy of his current State of Alaska Business License and Specialty or General Contractor license when requested in writing by the Purchasing Department.
- 1.04 BIDS
- A. The bidder shall review all of the proposed contract documents to ascertain all of the requirements of the work.
- 1.05 EXAMINATION OF PLANS, SPECIFICATIONS, SPECIAL PROVISIONS AND SITE WORK
- A. The bidder shall examine carefully the site of the proposed work, the proposal, plans, specifications and contract forms before submitting a proposal. The submission of a bid shall be an admission that the bidder has made such examination and is satisfied as to the conditions to be encountered in performing the work and as to the requirement and accuracy of the plans, specifications, special provisions and terms of the contract.
- B. All documents furnished to any person, under any condition, remain the property of the Anchorage School District and shall be returned immediately upon request.
- C. Documents may be obtained upon the conditions set forth in the Invitation to Bid.
- 1.06 METHOD FOR CLARIFICATION
- A. Any bidder in doubt as to the meaning of any part of the plans, specifications or other documents may submit a written request for an interpretation. The bidder submitting the

request will be responsible for its prompt delivery not less than seven (7) working days prior to the date set for opening of bids. Questions can be delivered as follows:

1. Fax: (907) 243-6293
2. Email: purchasing@asdk12.org
3. Mail: Purchasing Department  
4919 Van Buren Street  
Anchorage, Alaska 99517
4. Hours: 7:30 a.m. – 4:00 p.m.

- B. A written request for an interpretation, which in the opinion of the Purchasing Department requires a reply, will be answered by issuing an addendum to all plan holders prior to the bid opening. The Owner will not be responsible for any other explanation or interpretation of the plans, specifications or other documents made or given prior to the bid opening.

#### 1.07 PREPARATION OF BIDS

- A. Preparation and Submission:

Bids must be submitted on the forms furnished or copies thereof, and must be manually signed. In order to secure consideration, the bid must be submitted and sealed in an envelope on which contract identification is plainly marked on the outside. The bid form is included in the bidding documents. The envelope shall be addressed as indicated in the Invitation to Bid.

- B. Form:

The bid may provide for a quotation of a price, or prices, for one or more items which may be lump sum bids, alternate prices, scheduled items resulting in a bid on a unit of construction, or a combination thereof. Where required on the bid form, bidders must quote on all items and they are warned that failure to do so shall disqualify the bid.

If erasures or other changes appear on the forms, each such erasure or change must be initialed by the person signing the bid.

- C. Alternate Bids and Qualified Bids:

Bids may be rejected if they show any omissions, alteration of the forms, additions not called for, conditional or alternate bids not called for or irregularities of any kind.

#### 1.08 BID GUARANTEE

- A. Each bid shall be accompanied by a bid bond with good and sufficient surety or sureties acceptable to the Owner. The Anchorage School District will require five percent (5%) of the total amount of the base bid as a guarantee (**cash, personal, or business checks are not acceptable**). Bid guarantees for the three (3) low bidders will be held until the contract is executed.
- B. All other bid guarantees will be returned within seven (7) days of the bid opening. Power of Attorney for the official signing of the bond for the surety company must be submitted with the bond.

## 1.09 ALTERNATES

- A. The bidder shall include in the spaces provided on the "Bid Form" a bid for each alternate, if applicable.
- B. The Owner may accept alternates in any order or number and include them in the contract award price.

## 1.10 UNIT PRICES

- A. The bidder shall include in the spaces provided on the "Bid Form" a bid for each unit price, if applicable.
- B. The Owner may accept any or all of these unit prices and include them in the contract award price.
- C. In the case of discrepancy in the extended price calculation(s), the unit price(s) will prevail.

## 1.11 BIDDER QUALIFICATIONS (TO BE INCLUDED IF THERE IS NO 2-STEP QUALIFICATION PROCESS)

- A. Before the bid is considered for award, the Owner reserves the right to request the bidder to complete within seventy-two (72) hours a bidder qualification form and/or a current financial statement prepared by a Certified Public Accountant. Bidder qualifications to be listed upon the qualification form will include, as a minimum, a listing of bidder's previous contracts of a nature similar to that being bid upon; a listing of bidder's staff, to include managerial, technical and laboring positions; summary of bidder's plan and equipment available for use in the execution of the contract; and a listing of the projects to which the bidder is obligated in the near future. The Owner reserves the right to reject the bid of any bidder who fails to furnish promptly and properly all the information required in this paragraph.
- B. A bidder will be deemed to be unqualified to perform the contract if, after review and verification of the representations included on the qualification form submitted by the bidder, the following conditions appear:
  - 1. Bidder does not have sufficient prior experience (or an acceptable substitute thereof, as described below) with projects of a similar nature in technical, managerial and financial requirements to that in the present contract being bid.
    - a. Experience does not necessarily mean that the bidder is an established Contractor in the exact technical area for which the bid is submitted. In addition to such established contractors, newly established contractors will be considered qualified if they have shown on the bid qualification sheet form that they are staffed with sufficient technical, managerial and financial personnel with prior experience in the nature of construction for which the bids are invited, that bidder may adequately foresee and appreciate problems of such construction.
  - 2. Bidder does not have sufficient capability to undertake the obligations of the contract. A determination in this respect will be made when the Owner, upon review of the probable cash flow needs of the Contractor for this particular contract (to include payroll, cost of material and supplies, equipment rental costs and any other direct or incidental costs of the contract), determines that the Contractor does

not have sufficient financial resources to enable him to satisfy his financial obligations under the contract. The Owner will consider all other pertinent financial data required by this clause and submitted by the Contractor. A determination that the bidder is unqualified will not be made under this paragraph unless the Owner has determined that the bidder cannot meet his financial obligations under the contract after having considered all sources of income available to the bidder.

3. The bidder does not have sufficient staff, equipment or plant available to perform the contract. The Owner's determination in this matter will be based upon that represented by the bidder in his completion of the Bidder Qualification documents discussed above.
4. The bidder has a consistent history of unsatisfactory performance of contracts of this or similar nature, regardless of whether such contracts existed between the Owner and the Contractor, or other parties and the Contractor.
  - a. A determination of this nature will not be made unless the Owner, after review and verification of the contractor's previous work experience, determines that the contractor's consistent, unsatisfactory performance has resulted from the contractor's failure rather than a failure to perform by the other party. The Owner will give the Contractor an opportunity to explain such nonperformance(s) before any final determination is reached. Contract disputes which are pending resolution before any duly authorized judicial or administrative body will not be considered in reaching this determination.
  - b. A determination of a "consistent failure to perform" will not be made unless the Owner is satisfied after review of the bidder's prior experience that the Contractor has repeatedly failed to satisfy his obligations under past contracts. For purposes of this clause, "consistent" will not be construed to mean in every contract, nor will it be construed to include "isolated instances" of failure to perform.
  - c. In reaching any determination of this nature, the Owner may consider statements of other parties to the prior unperformed contracts, as well as the representations of the Contractor on his "Bidder Qualification" form. However, in each instance, the Owner will advise the Contractor of such other statements considered before a determination that the bidder is not qualified, as made by the Owner.
- C. The bidder's representations concerning his qualifications will be construed as a covenant under the contract. Should it appear that the bidder has made a material misrepresentation on his "Bidder Qualification" form, the Owner shall have the right to terminate the contract for the Contractor's breach, and the Owner may then pursue such remedies as exist elsewhere under this contract, or as otherwise are provided at law or equity.
- D. A determination that a bidder is unqualified will be made by the Owner. Such determination will be made in writing and include a thorough discussion of why the bidder is deemed unqualified. A letter will be sent to the bidder deemed unqualified, stating the reasons for such determination, and the bidder's right to request a review of this determination by appeal to the Anchorage School District Board.

- E. Any bidder who is deemed to be unqualified may, as provided under existing Anchorage School District policy, appeal such determination to the Anchorage School District Board prior to contract award to another bidder.

#### 1.12 RECEIPT AND OPENING OF BIDS

- A. Time of Opening:

Bids shall be submitted prior to the time specified in the Invitation to Bid, and the exact date and time of receipt of bids will be recorded. Late bids will not be considered, but will be held unopened until the time of award and then returned to the bidder, unless other disposition is requested or agreed to by the bidder. Time of bid receipt will be determined by the time stamp at the Purchasing Department, 4919 Van Buren Street, Anchorage, Alaska 99517.

- B. FAX/Telegraph/Telephonic/E-Mail Bids:

FAX/telegraphic/telephonic/e-mail bids will not be considered. Modification by FAX or telegraph of bids already submitted will be considered if received prior to the time fixed in the Invitation to Bid. FAX/telegraphic modifications shall not reveal the amount of the original or revised bid.

- C. Officer's Responsibility:

No responsibility will attach to any officer or agent of the Owner for the premature opening of, or the failure to open a bid not properly addressed and identified.

#### 1.13 WITHDRAWAL OF BIDS

- A. Bids may be withdrawn on written request received from the bidders prior to the time specified for opening.
- B. No bid shall be withdrawn for a period of ninety (90) days subsequent to the bid opening without the written consent of the Owner.

#### 1.14 BIDDERS INTERESTED IN MORE THAN ONE BID

- A. If more than one bid is offered by any party, by or in the name of his clerk, partner, or other person, all such bids will be rejected. A party who has quoted prices to a bidder is not thereby disqualified from quoting prices to other bidders, or from submitting a bid directly for the work.

#### 1.15 BIDDERS PRESENT

- A. At the time and place specified for the opening of bids, contents of the bids will be made public for the information of bidders and other parties.

#### 1.16 REJECTION OF BIDS

- A. The Owner reserves the right to reject any or all bids, and to waive any informalities or irregularities in bidding or award of the contract.

## 1.17 AWARD OF CONTRACT

## A. Acceptance of Bid:

Following the opening and evaluation of bids, the Owner will determine the apparent low responsive bidder and, subject to its right under Paragraph 1.16 to reject all bids, decide whether to accept the apparent low responsive bid. The Owner's acceptance of the apparent low responsive bid will be through a written notice from a duly authorized representative of the Owner, and no other act of the Owner or its representative will constitute an acceptance of a bid. The notice shall be titled "Notice of Intent to Award Contract," and shall set forth pre-award procedures and requirements, if any, including procedures for approval and award of contract by the School Board.

## B. Basis of Award

1. It is the Owner's intention to award a contract to the lowest responsive and responsible bidder, including alternates, base bid, and quantified unit prices accepted by the Owner at the time of award, if applicable.
2. Unit prices which are not quantified will not be included in the determination of the award.
3. The Owner reserves the right to award the alternates in any combination with the base bid and include them in the total award.
4. The District reserves the right to request the lowest bidder(s) whose bids are determined to be reasonably susceptible to award to review their previous bids with consideration of any additions, clarifications or modifications, submit revised bids for Best and Final Offers (bids). If Best and Final Offers are requested, selected offerors must submit revised bids on the forms provided by the District to be considered for evaluation and award. Bidders who do not submit a Best and Final Offers (revised bids), when requested, will not be considered for evaluation and award and their bids will be rejected and considered non-responsive.
  - a. For purposes of this ITB, bids that are "reasonably susceptible to award" means the three (3) lowest responsive and responsible bidders, unless, in the sole discretion of the District's Purchasing Senior Director, one or more of the three lowest responsive and responsible bidder(s) was not within the competitive range and to remain under consideration for award when evaluated with other bids or the District received one or more additional bids that are within the competitive range of the three lowest responsive and responsible bids such that the additional bid(s) may remain under consideration when evaluated with the other bids. This is a strict mathematical evaluation and may not be challenged on that basis except in the case of obvious arithmetic errors.

## C. Notification of Award to Bidders:

Following opening of bids and determination of the apparent low responsive bidder, the Administration will make public in the Purchasing Contracting Office each Notice of Intent to Award ten (10) calendar days prior to the scheduled award by the Board, except for purchases under \$100,000 which is three (3) business days. Bidders may, upon request to the Purchasing Office and/or Purchasing Contracting Office, review the bid tabulation summary prior to the scheduled Board award date.

## D. Amount of Contract

The amount of the contract shall be understood to be the lump sum as given in the

bid form. Where prices are given on alternative items, only the amounts of the alternates accepted by the Owner will be included in the total.

E. Execution of Contract:

By the Contractor: The bidder whose bid is accepted shall execute the contract and furnish the required bonding and insurance within five (5) days after presentation of the contract for signature. The contract shall be deemed to be executed by the successful bidder when two (2) originals of the contract, signed by an authorized officer of the corporation or company, and with each separately signed the bonds and insurances required herein, are received by the Owner. Failure or neglect to execute the contract, within the time specified or such extended period, if any, that the Owner may, in its sole discretion, authorize, shall constitute a breach of the agreement affecting the acceptance of the bid. The damages to the Owner for such a breach shall include loss from interference with the general Capital Improvements Program of the Owner, and other items whose accurate amount would be difficult or impossible to compute.

The amount of the bid guarantee of the successful bidder who fails or neglects to execute the contract after proper notification of the acceptance of the bid shall be retained by the Owner as liquidated damages for such breach.

By the Owner: Upon receipt of the above-referenced two (2) Contracts executed by the Contractor, including all required bonds and insurance certificates, the properly authorized Owner representatives will execute the documents within ten (10) days. The contract shall be deemed to be completely executed when two (2) copies thereof, accompanied by the required bond, liability and other necessary insurance and signed by the Contractor, are executed by the Owner. All awards shall comply with the Anchorage School District Purchasing and Contracting Policy 3311. Awards of \$500,000 or more shall be presented to the School Board for their approval.

1.18 PERFORMANCE BOND AND PAYMENT BOND

- A. The successful bidder will furnish a Performance Bond and a Payment Bond in accordance with Section 00700, Paragraph 7.5.

1.19 INSURANCE

- A. The successful bidder will furnish complete Certificates of Insurance, as required by the General Conditions and Supplementary Conditions, in a form acceptable to the Owner.

1.20 NOTICE TO PROCEED

- A. The Owner will issue a Notice to Proceed with the work within ten (10) days following the Owner's execution of the contract. The date of commencement of the work shall be the date established in the Notice to Proceed. The Owner will not be responsible for any costs incurred by the Contractor prior to the Notice to Proceed.

1.21 AGGRIEVED BIDDERS

- A. Protest:

1. An interested party may protest a solicitation or a proposed award of a contract.

INSTRUCTIONS TO BIDDERS

Division 0

Section 00100

- a. A protest as to the specifications and/or terms and conditions of a solicitation must be received by the Purchasing Senior Director at least five (5) calendar days prior to the due date of the bid or proposal; failure to protest as provided herein constitutes a waiver of any objection to the solicitation.
  - b. For construction projects and architectural/engineering design services, the protest of a proposed award of a contract must be received by the Purchasing Senior Director within ten (10) calendar days after issuance of the notice of intent to award, except that for purchases under \$100,000, the protest must be received within three (3) business days.
  - c. For goods or services, the protest of a proposed award of a contract must be received by the Purchasing Senior Director within seven (7) calendar days after issuance of the notice of intent to award, except that for purchases under \$100,000, the protest must be received within three (3) business days.
  - d. The protest must include the name of the person submitting the protest, the name of the bidder/proposer represented by that person, the specific action or bid/request for proposal contract award which is being protested, a detailed explanation of the reasons for the protest, and the relief requested.
  - e. The aggrieved person must serve all other interested parties with its protest.
2. The Purchasing Senior Director shall stay the intended award of a contract unless the Purchasing Senior Director determines the award of the contract without further delay is necessary to protect the District's best interest.
  3. The Purchasing Senior Director may, in his/her sole discretion, hold a hearing.
  4. The rights and remedies granted by this section are not available for informal small purchases with an actual or potential value of less than twenty-five thousand dollars (\$25,000).
  5. Failure to protest as provided herein constitutes a waiver of any objection to the solicitation and contract award.
- B. Appeal:
1. A decision by the Purchasing Senior Director may be appealed to the Anchorage School Board.
  2. Any appeal shall be filed with the Superintendent within five (5) days after the decision is received by the protester and must include the name of the person submitting the appeal, the name of the bidder/proposer represented by that person, and a detailed explanation of the basis for the appeal.
  3. The aggrieved bidder/proposer must serve all other interested parties with its appeal.
  4. The Superintendent may obtain an independent review of the appeal issues if the Superintendent determines such review will assist consideration of the appeal.

5. The independent review shall be conducted by a not directly involved District employee or an experienced but disinterested third party from outside the District.
6. Failure to appeal to the Anchorage School Board as provided herein constitutes a waiver of any objections to the solicitation and the contract award.

C. Consideration of Appeal:

1. The decision being appealed and the findings from the independent review, if any, will be reported to the Board.
2. Upon consideration of the appeal and allowing interested parties an opportunity to address the issues on appeal, the Board may:
  - a. Award the contract as recommended, if applicable, indicating its reasons for rejecting the appeal;
  - b. Grant the appeal, indicating its reasons for granting the appeal, and determine an appropriate remedy consistent with AR3311.1(c).1 of Board Policy. The Board may award the contract at that meeting to some other bidder/proposer if it finds that a delay in making the award would adversely affect the District;
  - c. Stay any award of the contract to permit further consideration of the appeal, with action to be scheduled as soon as practicable, but in no event more than twenty (20) days after the stay as initiated;
  - d. Reject all bids/proposals.
  - e. Take such other action as appears appropriate and in the best interest of the District under the circumstances.

D. Frivolous Protests:

1. **Signature on Protest Constitutes Certificate**  
The signature of an attorney or party on a request for review, protest, motion, or other document constitutes a certificate by the signer that the signer has read the document, to the best of his/her knowledge, information, and belief formed after reasonable inquiry it is well grounded in fact and is warranted by existing law or a good faith argument for the extension, modification, or reversal of existing law, and that it is not interposed for an improper purpose, such as to harass, limit competition, or to cause unnecessary delay or needless increase in the cost of the procurement or of the litigation.
2. **Sanctions for Violation**  
If a request for review, protest, pleading, motion, or other document is filed with the Purchasing Senior Director is signed in violation of Board Policy AR3311.1(c).1, the Board, may impose upon the person who signed it, a represented party, or both, an appropriate sanction, that may include an order to pay to the other party or parties the amount of the reasonable expenses incurred because of the filing of the protest, pleading, motion, or other paper, including a reasonable attorney's fee.

## 1.22 GUARANTEE SECTION

- A. Whether or not there appears here or elsewhere herein specific reference to guarantees of all items of material, equipment or workmanship, they nevertheless shall be so guaranteed against defects for which the Contractor is responsible that may develop or become evident within a period of one (1) year from and after final acceptance of the work by the Owner. This guarantee shall be understood to imply prompt attention to any remedy of such defects as those mentioned above if and as they occur after the Contractor shall have written notice of their existence. If the defect, in the opinion of the Owner, is of such nature as to demand immediate repair, the Owner shall have the right to make them and the cost thereof shall be borne by the Contractor.

## 1.23 SUBCONTRACTORS

- A. All subcontractors proposed for the work must be acceptable to the Owner.
- B. The Owner reserves the right to request the proposed subcontractors to complete qualification forms and/or current financial statements prepared by a Certified Public Accountant.

## 1.24 MINIMUM WAGE RATES

- A. Labor required for the construction of this project is subject to the minimum wage rates as provided in the General Requirements.

## 1.25 NON DISCRIMINATION

- A. No bidder/offeror on any District contract may illegally discriminate on the basis of sex, race, color, religion, gender identity, sexual orientation, national origin, ancestry, age, marital status, changes in marital status, pregnancy, parenthood, physical or mental disability, Vietnam era veteran status, genetic information, or good faith reporting to the board on a matter of public concern in employment, provision of services, or otherwise.
- B. Any bidder/offeror submitting a bid or proposal of one hundred thousand (\$100,000) or more must certify that if awarded a contract on the basis of that bid or proposal, he/she as the contractor will not illegally discriminate against any member or applicant for employment because of sex, race, color, religion, gender identity, sexual orientation, national origin, ancestry, age, marital status, changes in marital status, pregnancy, parenthood, physical or mental disability, Vietnam era veteran status, genetic information, or good faith reporting to the board on a matter of public concern in employment, provision of services, or otherwise.
  1. Notice of Compliance
    - a. All successful bidders/offerors shall insure such non-discrimination.
    - b. All successful bidders/offerors must agree to post in conspicuous places, available to employees and applicants for employment, notice setting forth the provisions of this non-discrimination section and this section shall be deemed to be a part of every contract entered into by the District under these policies.

## 2. Minority Business Enterprises

- a. The District requires adherence to the Anchorage Municipal Code, relating to Minority Business Enterprises and will monitor and implement these policies through the District's Equal Employment Opportunity Director (EEO).
- b. It is the policy of the District that socially and economically disadvantaged minority businesses located within the Municipality of Anchorage be afforded an equitable opportunity to participate in District contracts.
- c. Any appeal from a decision of the Equal Employment Opportunity Director shall be to the Superintendent and, if not satisfied, to the Board.

### 1.26 ASBESTOS FREE MATERIALS

- A. The bidder, by submitting a bid on this project, thereby certifies and guarantees to the Anchorage School District that any products or materials sold, used or installed under the terms of this contract will not contain any asbestos. In the event the product sold does not conform to the above standards, the buyer may return the product for correction or replacement at the seller's option and at the seller's expense. Services performed by the seller which do not conform to the above standards must be corrected by the seller at the seller's expense or make the appropriate correction within a reasonable time.

### 1.27 CONFLICT OF INTEREST

- A. The Contractor agrees to certify that Anchorage School District employees, School Board members, or a member of their household are not in conflict of interest with the contract and Board Policy as follows (AR3311.1(e).1 Disclosure and Waiver of Conflict of Interest):
  1. No Board member, employee, or a member of their household, shall acquire, directly or indirectly, an economic interest in a District or Municipal contract, or engage in business with the District or the municipality, unless the contract is competitively solicited and other requirements of Section 3311 of Board Policy and section 1.15 of the Anchorage Municipal Code are met.
  2. The following acts and circumstances shall not be deemed to be in conflict with the performance of official duties if, at the earliest opportunity after having acquired such knowledge, the Board member or employee files a disclosure pursuant to AR3311.1(e).1 or requests and obtains a waiver pursuant to Board Policy AR3311.1(e).2:
    - a. Such person owns a sole proprietorship, or is a partner in a partnership, or is an officer, director, major shareholder (five percent (5%) or more of the outstanding shares) or has management control in a corporation that submits a bid, proposal or quotation to the District or attempts to enter or enters into a contract with the District;
    - b. Such person has any significant (five percent (5%) or more) financial interest in any sale, lease or rental to the District of any service or property and such person has knowledge that the District intends to purchase, lease or rent the property or service;

- c. Such person wishes to sell or receive royalties on books or materials sold to the District for use in the school system for which the employee is the author;
  - d. Such person is an employee who has been providing private services to a child who transfers to a new school or class or advances to a higher grade and the child becomes a student in the class being taught/aided by his/her provider.
- B. Board Members, District employees, and their household and/or immediate family members are required to comply with Board Policies and the Municipal Ethics Code by disclosing conflicts of interest.
- 1. When a board member, employee, or their household and/or immediate family member intends to do business with the District, the appropriate District and Municipal forms must be filed by the Board Member or District employee with the Municipal Clerk's Office and the Purchasing Department.

Note: *Notice of Intent To Respond To Public Solicitation* shall be filed with the Municipal Clerk's office in advance to allow a minimum of **7 calendar days to elapse between electronic publication by the clerk and the final date** for submitting a response to the solicitation. The form may be obtained from the Municipality of Anchorage website, [www.muni.org](http://www.muni.org).

District *Disclosure* and *Request for Waiver* forms and instructions may be obtained from the Purchasing Bid Information link under Quick Links on the ASD website, [www.asdk12.org](http://www.asdk12.org).

- 2. The responsibility for complete and timely filing rests solely with the Board Member or District employee.
- C. Copies of all conflict of interest and ethics code documents should be submitted with your quote.
- 1.28 CONTRACT INDUCEMENTS
- A. No payment, gratuity or offer of employment shall be made in connection with any contract, by or on behalf of the subcontractor to the prime contractor or higher tier subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

#### 1.29 GOVERNANCE

- A. This solicitation is an Invitation to Bid ("ITB") governed by applicable Anchorage School Board Policies, including Section 3311 of such Policies. Anchorage School Board Policies are available at <https://www.boardpolicyonline.com/?b=anchorage>

Offerors should read this ITB carefully and review all instructions contained herein. Incomplete or incorrect bids may be rejected as not conforming to the essential requirements of the ITB. Bids submitted on other than the prescribed forms contained in this ITB will be rejected. Bidders may copy the forms contained in the ITB for use in their bids, but substitute forms or formats are unacceptable. Electronic copies of the forms which bidders must submit as part of any bid, if any—if not provided with this ITB—may be

obtained by contacting the Anchorage School District Purchasing Department. Forms shall not be altered except to supply requested bidder information.

### 1.30 APPRENTICESHIP UTILIZATION COMPLIANCE

- A. In order to be deemed a responsive bid/offer, bidders/offerors shall provide a signed notarized Apprenticeship Utilization Affidavit (“AUA”) with their bid. ASD reserves the right to request the signed notarized AUA to be submitted within three (3) working days after bid submission. By doing this, bidders/offerors are confirming that they understand and agree that in all trades/crafts categories in which there is an Alaskan Federally Registered Apprenticeship Program, they will ensure that 15% of the aggregate hours in those trades’ categories will be worked by apprentices, as mandated by Anchorage School Board Policy 3311.1.2. This applies to both prime contractor labor hours and subcontractor labor hours. By signing the AUA, bidders/offerors are confirming their understanding and agreement that ASD will request documentation to factually demonstrate compliance with the 15% Apprenticeship Utilization Policy (“AUP”), and conduct audits. Audits for projects will be conducted every 30 days. In addition to providing documentation to ASD to confirm that 15% of the labor hours worked in trades/crafts categories that have Alaskan Federally Registered Apprenticeship Program has been done by certified apprentices enrolled in such programs, the prime contractor will provide documentation to confirm that the apprentices listed on the documentation submitted are currently in good standing in their Alaskan Federally Registered Apprenticeship Program. Attached to the solicitation will be the current version of the Federally Registered Alaskan Apprenticeship Programs, which was provided to ASD by the Federal Department of Labor.
- B. Forms used to demonstrate compliance during the contract administration period are found in Section 00630 Construction Forms.
1. List of Federally Registered Alaskan Apprenticeship Programs
    - a. This list from the Federal Department of Labor will provide contractors with a list of Alaskan apprenticeship programs and crafts/trades categories that are subject to ASD’s AUP.
  2. Apprenticeship Utilization Form
    - a. The Prime Contractor will list the crafts/trades categories required to complete the project that have Alaskan Federally Registered Apprenticeship Programs. This list will include all crafts/trades categories for both the prime and subcontractors.
  3. Apprenticeship Utilization Program Calculation Form
    - a. This form will be submitted by the prime contractors to demonstrate compliance with the apprenticeship utilization percentage for both prime and subcontractors on the project.
    - b. Audits will be performed when the hours submitted by the prime’s and/or subcontractor’s certified payroll exceed 500 hours. Audits will continue as per the schedule unless the prime’s and the subcontractor’s certified payroll does not meet the minimum threshold of 500 hours. Prime and Subcontractors will be required to submit certified payrolls during periods where very little work is being performed. This will continue until the

minimum threshold of 500 hours is met and warrants an audit. Audits will be conducted from Site Available to Contractors through Final Completion on all projects awarded by the District in excess of \$100,000 at the time of bid.

4. Penalty Table

a. This table lists the penalties for non-compliance with the AUP.

C. Prime Contractors are required to meet with Purchasing to discuss forms and processes of Apprentice Utilization Program prior to start of work.

END OF SECTION

PROJECT SCHEDULE MILESTONE DATES

Division 0  
Section 00200

PROJECT SCHEDULE MILESTONE DATES

On-Site Visit .....	April 10, 2025
Pre-bid Conference .....	April 11, 2025
Bid Opening .....	April 24, 2025
Board Meeting (anticipated).....	N/A
Notice to Proceed (anticipated).....	May 15, 2025
Site Available to Contractor.....	May 27, 2025
Substantial Completion – Building .....	August 8, 2025
Substantial Completion - Site.....	August 8, 2025
Final Completion .....	September 5, 2025

Dates of Interest:

School Ends for Students.....	May 21, 2025
Teachers Last Day .....	May 22, 2025
Memorial Day Holiday .....	May 26, 2025
Juneteenth Holiday .....	June 19, 2025
Independence Day Holiday .....	July 4, 2025
Teachers First Day.....	August 11, 2025
Students First Day.....	August 14, 2025
Labor Day .....	September 1, 2025
Indigenous Peoples Day .....	October 13, 2025
Parent Teacher Conferences .....	October 22 – 23, 2025
Thanksgiving Holiday .....	November 27 – 28, 2025
Winter Vacation.....	December 22, 2025 – January 2, 2026

The Contractor shall be required to plan, schedule, execute and complete all work under the contract in accordance with the Project Schedule Milestone Dates set forth under this Section 00200. The above listed Project Schedule Milestone Dates for Substantial Completion and Final Completion may not be altered by the Contractor, either to schedule or to achieve early completion of the project, without the express written consent of the Owner.

The bidder's attention is drawn to the requirements of Division 1, Section 01311 of the General Requirements entitled Project Schedule and to the Phasing Drawings for associated phasing information.

END OF SECTION



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Project Title: Steller Secondary School Secure Entry

Invitation to Bid Number: 2025 – 810

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TO: Anchorage School District  
4919 Van Buren Street  
Anchorage, Alaska 99517

FROM: \_\_\_\_\_ BIDDER  
\_\_\_\_\_  
ADDRESS  
\_\_\_\_\_  
CITY/STATE  
\_\_\_\_\_  
PHONE/FAX  
\_\_\_\_\_  
EMAIL

Operating as (strike out conditions that do not apply) an individual, a company, a corporation, organized and existing under the laws of the State of \_\_\_\_\_, or a proprietorship, a partnership, or joint venture consisting of \_\_\_\_\_.

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1. BASE BID:

Having become completely familiar with the local conditions affecting the cost of the work at the place where work is to be executed, and having carefully examined the site and building conditions as they currently exist, and having carefully examined the proposed contract documents, together with any addenda to such contract documents as listed hereinafter, the undersigned hereby proposes and agrees to provide all labor, materials, equipment, transportation, supervision and other facilities as necessary and/or required to execute all of the work described by the aforesaid contract documents for the lump sum consideration of:

\$ \_\_\_\_\_ (In Numbers)

Said amount being hereinafter referred to as the base bid, base bid proposed, or lump sum.

For accounting purposes only, provide a cost breakdown for Door 300B. This will not be used to determine award of contract.

Door 300B: \$ \_\_\_\_\_ (In Numbers)

2. ALTERNATES:

The undersigned proposes to perform alternates for the stated resulting additions or deductions from the base bid. Additions and deductions shall include any modifications of work or additional work that the undersigned may deem to be required to perform by reason of the acceptance or rejection of any alternate, including allowances for overhead and profit, and in accordance with the Project Schedule Milestone Dates set forth under Section 00200 hereof. The Owner reserves the right to award the alternates in any order or number and include them in the contract award price.

A. None

3. UNIT PRICES:

The following unit prices will be used at the discretion of the Owner for the addition or deletion of work not reasonably implied or not included in the Contract Documents. Unit prices must include all labor, material, overhead, and profit for each unit of work. All unit price work will be processed by Request for Proposal followed by a Change Order to the Contract when quantities are verified and agreed upon.

A. None

4. ALLOWANCES / ASSIGNMENTS:

A. None

5. ADDENDA ACKNOWLEDGMENT:

The undersigned acknowledges receipt of the following addenda: (List by number and date appearing on addenda.)

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6. TIME OF COMPLETION:

The undersigned agrees to complete all work under this contract in accordance with the Project Schedule Milestone Dates set forth under Section 00200 hereof.

7. BID SECURITY:

A bid bond in the amount of five percent (5%) of the total amount of the base bid is attached in the sum of:

\$ \_\_\_\_\_ (In Numbers)

which is to become the property of the Owner in the event the Performance Bond and Payment Bond are not executed within the time set forth in paragraph 10 of this section, as liquidated damages for the delay and additional work caused the Owner.

8. The undersigned agrees that upon receipt of the notice of acceptance of his bid, he will execute the formal contract, and will deliver all proper bonds and proof of insurance coverage as may be required by the contract documents.

9. The undersigned agrees to accept the Assignment of the Bid Allowance as set forth in Section 01031, Bid Allowances.

10. The undersigned further agrees to execute the formal contract within ten (10) days from the date of the notice of acceptance of this bid, and in case the undersigned fails or neglects to appear within the specified time to execute the contract, the undersigned will be considered as having abandoned the contract, and the bid bond accompanying this bid will be forfeited to the Owner by reason of such failure on the part of the undersigned.

11. The undersigned further agrees to commence with the work under the contract in accordance with the date of commencement of the Work established in the Notice to Proceed.
12. The undersigned further agrees that the bid security may be retained by the Owner and that said bid guarantee shall remain with the Owner until the contract has been executed by the Owner.
13. The undersigned has checked all of the above figures, and understands that the Owner will not be responsible for any errors or omissions on the part of the undersigned in preparing this bid.
14. In submitting this bid, it is understood that the right is reserved by the Owner to reject any or all bids and waive any informalities and irregularities in connection therewith. It is agreed that this bid may not be withdrawn for a period of forty-five (45) days from the date and time of opening.
15. The undersigned declares that the person or persons signing this Bid Form is/are fully authorized to sign on behalf of the firm listed and to fully bind the firm listed to all the conditions and provisions thereof.
16. It is agreed that no person or persons or company other than the firm listed below or as otherwise indicated has any interest whatsoever in this bid or the contract that may be entered into as a result of the bid and that in all respects the proposal is legal and firm, submitted in good faith without collusion for fraud.
17. It is agreed that the undersigned has complied or will comply with all requirements of local, state and national laws, and that no legal requirement has been or will be violated in making or accepting this bid in awarding the contract to him and/or in the prosecution of the work required.

18. CONFLICT OF INTEREST:

I certify no member of the School Board or District employee, or spouse or other member of his/her household shall have any undisclosed interest as noted in paragraph entitled Conflict Of Interest (Section 00100). By and for the bidder:

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

19. APPRENTICESHIP UTILIZATION AFFIDAVIT (FOR BIDS OVER \$100,000)

Pursuant to School Board Policy 3311.1.2, Use of Apprentices, I \_\_\_\_\_  
the undersigned Principal for \_\_\_\_\_

on Solicitation \_\_\_\_\_ certify:

- A. I understand that Anchorage School District (“ASD”) School Board Policy 3311.1.2 states, “For capital maintenance and construction projects with an estimated total cost of more than \$100,000, the Anchorage School District shall require that no less than fifteen percent (15%) of the total hours worked on the project shall be performed by apprentices enrolled in a federally registered or State of Alaska-approved apprenticeship program. This requirement shall only apply to crafts for which an Alaskan federally registered apprenticeship program exists.”
- B. I will ensure that apprentices employed by the prime and sub-contractors, in the eligible trades categories, will provide no less than fifteen percent (15%) of the aggregate labor hours of those eligible trades categories.
- C. I understand that if awarded a contract in excess of \$100,000, ASD will audit the prime contractor at 30-day intervals. ASD reserves the right to audit at random intervals as needed.
- D. I understand ASD will conduct random site inspections to determine that employed apprentices are working at the project site.
- E. I understand that if I am awarded a contract ASD will require the following specific reporting requirements during the contract performance period to ensure that the 15% apprenticeship utilization requirement is met:
  - a. List of the apprentices the prime contractor intends to use to meet the utilization goal, and the Alaskan federally registered apprenticeship programs to which they belong (Apprenticeship Utilization Form);
  - b. List of the subcontractors that the prime contractor will use on this project;
  - c. List of the apprentices the subcontractor intends to use to meet the utilization goal required by the prime contractor, and the apprenticeship programs they belong to (Apprenticeship Utilization Form);
  - d. Submission of Apprenticeship Utilization Program Calculations Form, to be submitted by the prime contractor, at 30-day intervals for contracts exceeding \$100,000, consisting of a compliance spreadsheet, with supporting documents demonstrating compliance by both the prime contractor and all subcontractors, identifying the trades categories that are subject to the utilization requirement, apprentice employees used to meet the goals, and apprentice hours calculation showing compliance with the required 15% utilization when compared to total hours worked in the eligible trades categories.
- F. I understand a non-compliance penalty for projects exceeding \$100,000 will be assessed at each 30-day audit per the Penalty Table, if I am found to be non-compliant during the contract period.
  - a. Failure to comply at 1st 30-day audit will result in a penalty per the Penalty Table, which will be deducted from the prime contractor’s invoice.
  - b. Failure to comply in a consecutive 2nd 30-day audit will result in a penalty per the Penalty Table, which will be deducted from the prime contractor’s invoice.
  - c. Failure to comply in a consecutive 3rd 30-day audit will result in a penalty per the Penalty Table, which will be deducted from the prime contractor’s invoice.

- d. Failure to comply in a consecutive 4th 30-day audit will result in a penalty per the Penalty Table, which will be deducted from the prime contractor's invoice, and may result in a finding of non-responsibility on future bidding. (This penalty will repeat for any future non-compliance.)
- G. Application of the Penalty Table:
- a. Advancement of penalties in the Penalty Table will only be assessed for consecutive non-compliance. If the contractor gets back into compliance, any future non-compliance will be assessed at the beginning step of the Penalty Table, per the applicable contract threshold category.
- H. Lack of Apprentice(s) availability:
- a. If a contractor is awarded a contract but cannot meet the apprenticeship utilization requirement, and fail an audit, the contractor will have the opportunity to request a waiver from the apprenticeship utilization requirement. A waiver will only be granted if the contractor can factually demonstrate that the cause was from a lack of available apprentices in eligible trades categories.
- I. ASD will provide the List of Alaskan Federal Registered Apprenticeship Programs, which contains the crafts/trades categories within those federally registered programs. Once per year, ASD will receive the updated List of Alaskan Federal Registered Apprenticeship Programs from the Federal Department of Labor to capture any new Alaskan Federally Registered Apprenticeship Programs that have been added, or to capture any that have been dissolved or discontinued. The List of Alaskan Federal Registered Apprenticeship Programs provided to ASD by the Federal Department of Labor will be posted on ASD's website, as contained in the solicitation, so contractors have access to it.
- J. Definitions:
- a. **Alaskan Federally Registered Apprenticeship Programs** are programs approved by the Federal Department of Labor, US DOL Office of Apprenticeship.
  - b. **Eligible Trades Categories** are the crafts/trades categories that fall under an Alaskan Federally Registered Apprenticeship Program. Eligible Trades Categories will be the categories measured for aggregate project hours and apprentice hours to establish the apprenticeship utilization percentage.
  - c. **The List of Alaskan Federal Registered Apprenticeship Programs** is a current list provided by ASD to contractors that shows the Alaskan Federally Registered Apprenticeship Programs and the eligible trades categories under those programs. That current list will be the list in effect and in force during the issuance of the solicitation. Any changes to the list will affect future solicitations and will not be retroactive to prior solicitations.
  - d. **Random Site Inspections** are defined as non-scheduled site inspections, in which ASD's representative will visit the project site to establish if apprentices are physically on-site. ASD will provide a minimum of 24 hours' notice to contractors prior to the site inspections.
  - e. **Consecutive Non-Compliance** is when a contractor consecutively fails to meet the required apprenticeship utilization percentage. If a contractor fails an audit, but then passes the next audit, any future non-compliance will be addressed at the first step of the Penalty Table per the contract values in the table.
  - f. **The Measurement of Aggregate Apprenticeship Utilization Hours** is defined by the following. Compliance will be audited at 30-day intervals for projects exceeding \$100,000. Each 30 day audit period will be measured independently for aggregate apprenticeship utilization hours. If a contractor does not meet the 15% apprenticeship utilization requirement in an audit period, a penalty will be assessed, per the penalty table. However, the deficiency in percentage of apprenticeship utilization hours, will not be carried forward from one audit period to the next. Contractors will only be required to meet the 15% apprenticeship utilization requirement in each audit period, which will be measured

independently. In addition, if the aggregate hours for all audit periods for the entire project are 15% or greater, any previously assessed penalties for non-compliance in an audit period will be rescinded.

- g. **Finding of non-responsibility:** If ASD determines a contractor to be non-responsible, they will not be permitted to bid on ASD projects.

IN WITNESS WHEREOF, the signature of the undersigned Contractor has been hereunto set this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, at \_\_\_\_\_, Alaska.

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

Printed Name: \_\_\_\_\_

I, \_\_\_\_\_, being first duly sworn, say that I am the agent for and executed the foregoing under authority of said company to do so; that I have read the same, know the contents thereof, and the matter set forth therein are as I truly believe.

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

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, at \_\_\_\_\_, Alaska.

Notary Public in and for: \_\_\_\_\_

My Commission Expires: \_\_\_\_\_.

20. LICENSE NUMBER(S):

Alaska Business License Number: \_\_\_\_\_

Alaska General or Specialty Contracting License Number: \_\_\_\_\_

Respectfully Submitted, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

Firm Name: \_\_\_\_\_

Federal Tax ID: \_\_\_\_\_

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

\_\_\_\_\_

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

Name (Typed): \_\_\_\_\_

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

CORPORATE SEAL (if applicable)

ENCLOSURES:

1. Bid Guarantee (in the form and amount specified or required, include Power of Attorney For Surety)

END OF SECTION



OWNER – CONTRACT AGREEMENT FORM

REFERENCE:

1. The form of agreement between the Owner and the Contractor shall be the form bound herein.
2. The Agreement shall be executed in duplicate.



**CONTRACT NO. XXCXXXX**  
**SCHOOL PROJECT TITLE**  
**ITB 202X-8XX**  
**ASD PROJECT NO.**

Board Memo No.: N/A or NumberDate of Contract: Date of Contract

Company  
Address  
City, State, Zip

Sole Proprietorship  
 Partnership  
 Incorporated in the  
State of Alaska

OWNER: ANCHORAGE SCHOOL DISTRICT, ANCHORAGE ALASKA

CONTRACT FOR: ITB SCHOOL PROJECT TITLEAmount of Contract: Amount of Contract in words Dollars and No Cents

Base Bid:	\$xxx,xxx.xx
Additive Alternate 1:	\$xxx,xxx.xx
Siemens Allowance:	\$xxx,xxx.xx
Total:	\$xxx,xxx.xx

Statement of Work: The Contractor shall furnish all labor, equipment and materials and perform the work above described for the amount stated in strict accordance with Contract Documents, all of which are made a part of this Contract and designated as follows:

**CONTRACT DOCUMENTS**

- I. This Contract, consisting of two (2) pages.
- II. Section 00620 Performance Bond and Payment Bond, consisting of nine (9) pages, dated (date of contract) and attached Power of Attorney for Surety.
- III. Contractor signed Bid Form, Section 00300 and signed Addendum/a consisting of four (4) or five (5) pages.
- IV. Alaska Sex Offender/Child Kidnapper Registry Contractor Certification consisting of one (1) page.
- V. Certificates of Insurance.
- VI. Invitation to Bid (number) Project Manual dated (date) and all Drawings are hereby incorporated by reference as if in full text.

In the event of a conflict between any of the Contract Documents and the provisions of any purchase order of materials or service request issued in connection with this Contract, the provisions of the Contract Documents shall prevail.

Work shall be started in accordance with the Notice to Proceed. Time being of the essence, work shall be completed in accordance with the Project Schedule Milestone Dates set forth under Section 00200 thereof.

The ASD Project Manager for this Contract is: Insert Name of Project Manager Cell (907) XXX-XXXX, Office (907) XXX-XXXX and insert email address.

The attached performance and payment bond is in due form according to law, and is hereby approved.

\_\_\_\_\_  
Anchorage School District Attorney

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

IN WITNESS WHEREOF, the parties hereto have executed this Contract as of this date entered on the first page hereof.

ANCHORAGE SCHOOL DISTRICT

CONTRACTOR BUSINESS NAME

\_\_\_\_\_  
David Whiting, Date  
Senior Director of Purchasing/Warehouse

\_\_\_\_\_  
Contractor Signature Date

\_\_\_\_\_  
Contractor Print Name and Title

Corporate Seal

Account Code(s):

BID BOND FORM

REFERENCE:

1. If the Bid Guarantee is submitted on Bond Form, the Bid Bond shall be the form as bound herein.



BID BOND

KNOW ALL MEN BY THESE PRESENT that we, \_\_\_\_\_ as  
Contractor

PRINCIPAL, and \_\_\_\_\_, a corporation duly organized under the laws  
Surety

of the State of \_\_\_\_\_, as SURETY/OBLIGOR authorized to transact surety business in the state of Alaska, are held and firmly bound unto the ANCHORAGE SCHOOL DISTRICT, as OBLIGEE, in the amount of 5% of the Base Bid Amount for payment whereof PRINCIPAL and SURETY bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these present.

WHEREAS, the PRINCIPAL is herewith submitting its proposal for \_\_\_\_\_

\_\_\_\_\_

The condition of this obligation is such that if the PRINCIPAL will, within the time required, enter into a formal contract, and give a good and sufficient bond to secure the performance of the terms and conditions of the contract, then this Obligation to be void; otherwise, the PRINCIPAL and SURETY will pay unto the OBLIGEE the amount stated above.

**OWNER**

Anchorage School District  
4919 Van Buren Street  
Anchorage, Alaska 99517

**CONSTRUCTION PROJECT**

Solicitation No.: \_\_\_\_\_

Location: \_\_\_\_\_

\_\_\_\_\_

**CONTRACTOR**

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

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

City/State: \_\_\_\_\_

**SURETY**

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

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

City/State: \_\_\_\_\_

IN TESTIMONY WHEREOF, the parties hereunto have caused the execution of this bond on the \_\_\_\_\_  
day of \_\_\_\_\_, 20\_\_\_\_.

**PRINCIPAL**

**SURETY**

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Corporate Surety Name (Seal)

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

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

\_\_\_\_\_  
Typed Name and Title

\_\_\_\_\_  
Typed Name, Attorney-in-fact

\_\_\_\_\_  
WITNESS AS TO PRINCIPAL

Note: Attach Power of Attorney for Surety Signator.

END OF SECTION

PERFORMANCE BOND AND PAYMENT BOND

REFERENCE:

1. The Performance Bond and Payment Bond shall be the forms as bound herein.



**CONSTRUCTION PERFORMANCE BOND**

KNOW ALL MEN BY THESE PRESENT that we, \_\_\_\_\_ as  
Contractor

PRINCIPAL, and \_\_\_\_\_, a corporation duly organized under the laws  
Surety

of the State of \_\_\_\_\_, as SURETY/OBLIGOR authorized to transact surety business in the  
state of Alaska, are held and firmly bound unto the ANCHORAGE SCHOOL DISTRICT, as OBLIGEE, in  
the amount

of \_\_\_\_\_  
\_\_\_\_\_ Dollars

(\$ \_\_\_\_\_), for payment whereof PRINCIPAL and SURETY bind ourselves, our heirs,  
executors, administrators, successors and assigns, jointly and severally, firmly by these present.

This Construction Performance Bond ("Bond") is entered into by and between the undersigned parties to  
ensure the faithful performance of the Construction Contract listed below.

**OWNER**

Anchorage School District  
4919 Van Buren Street  
Anchorage, Alaska 99517

**CONSTRUCTION PROJECT**

Solicitation No.: \_\_\_\_\_  
Location: \_\_\_\_\_

**BOND**

Number: \_\_\_\_\_  
Date: \_\_\_\_\_  
Amount: \_\_\_\_\_

**CONSTRUCTION CONTRACT**

Number: \_\_\_\_\_  
Date: \_\_\_\_\_  
Amount: \_\_\_\_\_

**CONTRACTOR**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State: \_\_\_\_\_

**SURETY**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State: \_\_\_\_\_

PERFORMANCE BOND AND PAYMENT BOND

Division 0  
Section 00620

IN TESTIMONY WHEREOF, the parties hereunto have caused the execution hereof of two (2) original counterparts as the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**PRINCIPAL**

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed Name and Title

**SURETY**

\_\_\_\_\_  
Corporate Surety Name (Seal)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed Name, Attorney-in-fact

\_\_\_\_\_  
WITNESS AS TO PRINCIPAL

Note: Attach Power of Attorney for Surety Signator.

## CONSTRUCTION PERFORMANCE BOND TERMS AND CONDITIONS

1. The CONTRACTOR and the SURETY, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to the OWNER for the complete and proper performance of the Construction Contract, which is incorporated herein by reference.
2. If the CONTRACTOR completely and properly performs all of its obligations under the Construction Contract, the SURETY and the CONTRACTOR shall have no obligation under this Bond.
3. If there is no OWNER Default, the SURETY's obligation under this Bond shall arise after:
  - a. OWNER has declared a CONTRACTOR Default under the Construction Contract pursuant to the terms of the Construction Contract; and
  - b. The OWNER has agreed to pay the Balance of the Contract Sum to:
    - i. The SURETY in accordance with the terms of this Bond and the Construction Contract; or
    - ii. A contractor selected to perform the Construction Contract in accordance with the terms of this Bond and the Construction Contract.
4. When the OWNER has satisfied the conditions of Paragraph 3, the SURETY shall promptly (within thirty (30) days) and at the SURETY's expense elect to take one of the following actions:
  - a. Arrange for the CONTRACTOR, with consent of the OWNER, to perform and complete the Construction Contract (but OWNER may withhold consent, in which case the SURETY must election option 4b, 4c or 4d, below); or
  - b. Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; or
  - c. Obtain bids from qualified contractors acceptable to OWNER for a contract for performance and completion of the Construction Contract, and, upon determination by OWNER of the lowest responsive and responsible bidder, arrange for a contract to be prepared for execution by OWNER and the contractor selected with OWNER's concurrence, to be secured with performance and payment bonds executed by a qualified SURETY equivalent to the bonds issued on the Construction Contract; and, if the SURETY's obligations defined in Paragraph 6 exceed the Balance of the Contract Sum, then the SURETY shall pay to OWNER the amount of such excess; or
  - d. Waive its right to perform and complete, arrange for completion, or obtain a new contractor and, with reasonable promptness under the circumstances and after investigation and consultation with OWNER, determine in good faith the amount for which it may then be liable to OWNER under Paragraph 6 for the performance and completion of the Construction Contract and, as soon as practicable after the amount is determined, tender payment therefore to OWNER with full explanation of the payment's calculation. If OWNER accepts the SURETY's tender under this paragraph 4.d, OWNER may still hold SURETY liable for future damages then unknown or unliquidated resulting from the CONTRACTOR Default. If OWNER disputes the amount of the SURETY's tender under this paragraph 4.d, OWNER may exercise all remedies available to it at law to enforce the SURETY's liability under paragraph 6.

5. If the SURETY does not proceed as provided in Paragraph 4, then the SURETY shall be deemed to be in default on this Bond ten (10) days after receipt of an additional written notice from OWNER to the SURETY demanding that the SURETY perform its obligations under this Bond. At all times OWNER shall be entitled to enforce any remedy available to OWNER at law or under the Construction Contract including, without limitation, and by way of example only, rights to perform work, protect work, mitigate damages, or coordinate work with other consultants or contractors.
6. The SURETY's monetary obligation under this Bond is limited by the amount of this Bond. Subject to these limits, the SURETY's obligations under this Bond are commensurate with the obligations of the CONTRACTOR under the Construction Contract. The SURETY's obligations shall include but are not limited to:
  - a. The responsibilities of the CONTRACTOR under the Construction Contract for completion of the Construction Contract and correction of defective work;
  - b. The responsibilities of the CONTRACTOR under the Construction Contract to pay liquidated damages, and for damages for which no liquidated damages are specified in the Construction Contract, actual damages caused by non-performance of the Construction Contract, including but not limited to, all valid and proper back charges, offsets, payments, indemnities or other damages;
  - c. Additional legal, design professional and delay costs resulting from the CONTRACTOR Default or resulting from the actions or failure to act of the SURETY under Paragraph 4.
7. No right of action shall accrue on this Bond to any person or entity other than OWNER or its heirs, executors, administrators, or successors.
8. The SURETY hereby waives notice of any change, alteration or addition to the Construction Contract or to related subcontracts, purchase orders and other obligations, including changes of time. The SURETY consents to all terms of the Construction Contract, including provisions on changes to the Contract. No extension of time, change, alteration, modification, deletion, or addition to the Contract Documents, or of the work required thereunder, shall release or exonerate SURETY on this Bond or in any way affect the obligations of SURETY on this Bond.
9. Any proceeding, legal or equitable, under the Bond shall be instituted in the Superior Court for the State of Alaska, Third Judicial District.
10. Notice to the SURETY, OWNER or the CONTRACTOR shall be mailed or delivered to the address shown on the front page.
11. Any provision in this Bond conflicting with any statutory or regulatory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein.
12. Definitions.
  - a. Balance of the Contract Sum: The total amount payable by OWNER to the CONTRACTOR pursuant to the terms of the Construction Contract after all proper adjustments have been made under the Construction Contract, for example, deductions for progress payments made, and increases/decreases for approved modifications to the Construction Contract.
  - b. Construction Contract: The agreement between OWNER and the CONTRACTOR identified on the signature page, including all Contract Documents and changes thereto.

PERFORMANCE BOND AND PAYMENT BOND

Division 0

Section 00620

- c. CONTRACTOR Default: Material failure of the CONTRACTOR which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract, including but not limited to, the provisions of Article 14 of the General Conditions of the Construction Contract.
- d. OWNER Default: Material failure of OWNER, which has neither been remedied nor waived, to pay the CONTRACTOR progress payments due under the Construction Contract or to perform other material terms of the Construction Contract, if such failure is the cause of the asserted CONTRACTOR Default and is sufficient to justify CONTRACTOR termination of the Construction Contract.



**PAYMENT BOND**

KNOW ALL MEN BY THESE PRESENT that we, \_\_\_\_\_ as  
Contractor

PRINCIPAL, and \_\_\_\_\_ a corporation duly organized under the laws  
Surety

of the State of \_\_\_\_\_, as SURETY/OBLIGOR authorized to transact surety business in the  
state of Alaska, are held and firmly bound unto the ANCHORAGE SCHOOL DISTRICT, as OBLIGEE, in  
the amount

of \_\_\_\_\_ Dollars

(\$ \_\_\_\_\_), for payment whereof PRINCIPAL and SURETY bind ourselves, our heirs,  
executors, administrators, successors and assigns, jointly and severally, firmly by these present.

This Payment Bond ("Bond") is entered into by and between the undersigned parties to ensure the faithful  
performance of the Construction Contract listed below.

**OWNER**

Anchorage School District  
4919 Van Buren Street  
Anchorage, Alaska 99517

**CONSTRUCTION PROJECT**

Solicitation No.: \_\_\_\_\_  
Location: \_\_\_\_\_

**BOND**

Number: \_\_\_\_\_  
Date: \_\_\_\_\_  
Amount: \_\_\_\_\_

**CONSTRUCTION CONTRACT**

Number: \_\_\_\_\_  
Date: \_\_\_\_\_  
Amount: \_\_\_\_\_

**CONTRACTOR**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State: \_\_\_\_\_

**SURETY**

Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City/State: \_\_\_\_\_

PERFORMANCE BOND AND PAYMENT BOND

Division 0  
Section 00620

IN TESTIMONY WHEREOF, the parties hereunto have caused the execution hereof of two (2)  
original counterparts as the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_.

**PRINCIPAL**

\_\_\_\_\_  
Contractor Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed Name and Title

**SURETY**

\_\_\_\_\_  
Corporate Surety Name (Seal)

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Typed Name, Attorney-in-fact

\_\_\_\_\_  
WITNESS AS TO PRINCIPAL

Note: Attach Power of Attorney for Surety Signator.

PAYMENT BOND TERMS AND CONDITIONS

The condition of this obligation is such that if the PRINCIPAL shall promptly make payment to all Claimants who furnish labor or materials in the prosecution of the Work provided for in the Construction Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect.

This Bond has been furnished to comply with Alaska Statute 36.25.010, and to allow enforcement rights pursuant to Alaska Statute 36.25.020. Any provisions in this Bond conflicting with said statutory requirements shall be deemed deleted herefrom and provisions conforming to such statutory requirements shall be deemed incorporated herein.

The SURETY hereby waives notice of any change, alteration or addition to the Construction Contract or to related subcontracts, purchase orders and other obligations, including changes of time. The SURETY consents to all terms of the Construction Contract, including provisions on changes to the Contract. No extension of time, change, alteration, modification, deletion, or addition to the Contract Documents, or of the work required thereunder, shall release or exonerate SURETY on this Bond or in any way affect the obligations of SURETY on this Bond.

END OF SECTION



SAMPLE FORMS AND CERTIFICATES

A.GENERAL

A.01 RELATED WORK SPECIFIED ELSEWHERE

- A. Comply with the contract conditions requirements and specified administrative procedures in closing-out work.

A.02 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. Section 01700: Project Close-out
- B. General and Supplementary General Conditions

A.03 APPLICATION AND CERTIFICATE FOR PAYMENT

- A. Use Anchorage School District Form 100, 100A, 100B, and 100C attached herein.

A.04 CERTIFICATION OF SUBSTANTIAL COMPLETION

- A. Use Anchorage School District Form 101 attached herein.

A.05 CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS

- A. Use Anchorage School District Form 102 attached herein.

A.06 RELEASE ON CONTRACTS

- A. Use Anchorage School District Form 103 attached herein.

A.07 CONSENT OF SURETY COMPANY TO FINAL PAYMENT

- A. Use Anchorage School District Form 104 attached herein.

A.08 CONSENT OF SURETY TO REDUCTION IN OR PARTIAL RELEASE OF RETAINAGE

- A. Use Anchorage School District Form 105 attached herein.

A.09 CERTIFICATES OF INSURANCE

- A. The contractor's Certificate of Insurance shall be on an industry standard form with, as a minimum, the categories and clauses on the Accord form with contractual clauses for contract number and description, subrogation waiver, additional insured and cancellation notification.

A.10 REQUEST FOR INFORMATION

- A. Contractor's requests for information shall be on Anchorage School District request for information forms.

A.11 PRIME CONTRACT POTENTIAL CHANGE ORDER ( PCO)

- A. Proposals will be executed on Anchorage School District PCO forms.

A.12 CERTIFICATE OF COMPLIANCE

- A. The Contractor shall submit a notarized Certificate of Compliance, contained in this section, with his application for Final Payment.

A.13 WARRANTY OF WORK

- A. The Contractor shall furnish to the Owner a notarized Warranty of Work after Final Payment, contained in this section, with his application for Final Payment.

A.14 AHERA EXCLUSION DOCUMENT

- A. The Contractor shall furnish to the Owner a signed AHERA Exclusion Document, contained in this section, with his application for Final Payment.

A.15 PRIME CONTRACT CHANGE ORDER (PCCO)

- A. Change Orders/Contract Modifications will be executed on Anchorage School District PCCO forms.

A.16 CONTRACTOR'S QUALITY CONTROL REPORT (CQC)

- A. The Contractor shall complete the CQC Report in accordance with Section 01400.

A.17 DEPARTMENT OF LABOR NOTICE OF WORK

- A. The Contractor shall furnish to the Department of Labor a Notice of Work prior to start of construction.

A.18 DEPARTMENT OF REVENUE TAX CLEARANCE REQUEST FORM

- A. For projects funded through the Department of Education (debt reimbursement or DEED grants), the Contractor shall furnish to the Owner a Tax Clearance Request Form approved by the Department of Revenue, contained in this section, with his application for Final Payment.

A.19 DEPARTMENT OF LABOR TAX CLEARANCE REQUEST FORM

- A. For projects funded through the Department of Education (debt reimbursement or DEED grants), the Contractor shall furnish to the Owner a Tax Clearance Request Form approved by the Department of Labor, contained in this section, with his application for Final Payment.

A.20 SUBMITTAL CONTROL FORM

- A. Submittals will be executed on Anchorage School District Submittal Control Forms.

A.21 STATE OF ALASKA SEX OFFENDER/CHILD KIDNAPPER REGISTRY CONTRACTOR CERTIFICATION

- A. Contractor certifies contractor is familiar with and is in compliance with Anchorage School Board Policy 3515.5, that no employee or agent of contractor who will be on district property is registered as a sex offender or child kidnapper in Alaska [Alaska Department of Public Safety “Sex Offender/Child Kidnapper Registry”] or in any other state in which the employee or agent previously lived or worked, and that, to contractors knowledge, no employee or agent is a convicted sex offender or child kidnapper.

A.22 STATE OF ALASKA SEX OFFENDER/CHILD KIDNAPPER REGISTRY SUBCONTRACTOR CERTIFICATION

- A. Subcontractor certifies subcontractor is familiar with and is in compliance with Anchorage School Board Policy 3515.5, that no employee or agent of subcontractor who will be on district property is registered as a sex offender or child kidnapper in Alaska [Alaska Department of Public Safety “Sex Offender/Child Kidnapper Registry”] or in any other state in which the employee or agent previously lived or worked, and that, to subcontractors knowledge, no employee or agent is a convicted sex offender or child kidnapper.

A.23 STATE OF ALASKA SEX OFFENDER/CHILD KIDNAPPER REGISTRY SUB-SUBCONTRACTOR CERTIFICATION

- A. Sub-subcontractor certifies sub-subcontractor is familiar with and is in compliance with Anchorage School Board Policy 3515.5, that no employee or agent of sub-subcontractor who will be on district property is registered as a sex offender or child kidnapper in Alaska [Alaska Department of Public Safety “Sex Offender/Child Kidnapper Registry”] or in any other state in which the employee or agent previously lived or worked, and that, to sub-subcontractors knowledge, no employee or agent is a convicted sex offender or child kidnapper.

A.24 LIST OF FEDERALLY REGISTERED ALASKAN APPRENTICESHIP PROGRAMS

- A. This list from the Federal Department of Labor will provide contractors with the list Alaskan apprenticeship programs and crafts/trades categories that are subject to ASD’s AUP.

A.25 APPRENTICESHIP UTILIZATION FORM

- A. The Prime Contractor will list the crafts/trades categories required to complete the project that have Alaskan Federally Registered Apprenticeship Programs. This list will include all crafts/trades categories for both the prime and subcontractors.

A.26 APPRENTICESHIP UTILIZATION PROGRAM CALCULATION FROM

- A. This form will be submitted by the prime contractors to demonstrate compliance with the apprenticeship utilization percentage for both prime and subcontractors on the project.

A.27 PENALTY TABLE

- A. This table lists the penalties for non-compliance with the AUP.

<b>ANCHORAGE SCHOOL DISTRICT APPLICATION FOR PAYMENT</b>	
Project Name: ITB/RFP No.: Name of Contractor: Address:	Contract #: Application #: Application date: Period to:
<b>COMPUTATION OF PAYMENT DUE</b>	
(a) Original contract amount (ASD 100A)	\$ -
(b) Net Change by Change Orders (ASD 100B)	\$0.00
(c) Adjusted contract amount to date (a+b)	\$ -
(d) Work Completed to Date (ASD 100B)	\$ -
(e) Materials Stored (ASD 100B)	\$ -
(f) Total Completed and Stored To Date (d+e)	\$ -
(g) Less: amount retained in accordance with contract terms	\$ -
(h) Net amount earned on contract work to date (f-g)	\$ -
(i) Less: amount of previous payments (ASD 100B)	\$0.00
<b>(j) CURRENT PAYMENT DUE (h-i)</b>	<b>\$ -</b>
(k) Balance to Finish (c-h)	\$ -
<b>CERTIFICATION OF CONTRACTOR</b>	
According to the best of my knowledge and belief, I certify that all items and amounts shown on the face of this Application for Payment are correct; that all work has been performed and/or material supplied in full accordance with the requirements of the referenced Contract, and/or duly authorized deviations, substitutions, alterations, and/or additions; that payment has been made for all materials received and work performed for which previous pay applications were approved; that no part of the "Balance Due This Payment" has been received and that it is currently due.	
_____	By _____
(Contractor)	(Signature of Authorized Representative)
_____	_____
Date	Title
<b>CERTIFICATION OF ARCHITECT</b>	
According to the best of my knowledge and belief, and based on on-site observations, I certify that the work completed as shown on ASD 100B has progressed as indicated, the quality of work is in accordance with the Contract Documents, and the Contractor is entitled to payment of the Current Payment Due shown above.	
_____	_____
Date	(Signature of Architect)
<b>APPROVED FOR PAYMENT</b>	
_____	_____
Date	(ASD Project Manager)

ASD 100 (1/15)

<b>ANCHORAGE SCHOOL DISTRICT APPLICATION FOR PAYMENT</b>							
<b>Summary of Original Contract, Change Orders, and Payments</b>							
Project Name: ITB/RFP No.:		Contract #:		Application #:		Application date:	
Name of Contractor:		Original Contract		Period to:			
Date	No.	Description	Change Orders	Payments	Contract Balance	Comments	
TOTAL CHANGE ORDERS			\$0.00				
TOTAL CONTRACT & PAYMENTS			\$	-	\$0.00		

ASD 100A (1/15) Contract Accounting Summary

ANCHORAGE SCHOOL DISTRICT APPLICATION FOR PAYMENT Detail of Schedule of Values and Work Completed								
A Item	B Description of Work	C Scheduled Value	D WORK COMPLETED		E This Period	F Materials Presently Stored (Not in D or E)	G TOTAL Completed and Stored to Date (D+E+F)	H Balance to Finish (C + G)
			From Prior Application (D+E)	% (G+C)				
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Project Name: \_\_\_\_\_  
 ITB/RFP No.: \_\_\_\_\_  
 Name of Contractor: \_\_\_\_\_

Contract #: \_\_\_\_\_  
 Application #: \_\_\_\_\_  
 Application date: \_\_\_\_\_  
 Period to: \_\_\_\_\_



<b>ANCHORAGE SCHOOL DISTRICT</b> <b>APPLICATION FOR PAYMENT</b> <b>Schedule of Stored Materials</b>		
Project Name: ITB/RFP No.: Name of Contractor:	Contract #: Application #: Application date: Period to:	
INVOICE #	VENDOR	DESCRIPTION
		AMOUNT STORED AT END OF THIS PERIOD
		-
		TOTAL STORED MATERIALS
		\$

**CERTIFICATE OF SUBSTANTIAL COMPLETION**

Project: \_\_\_\_\_ Contract Number: \_\_\_\_\_

Contractor: \_\_\_\_\_ Contract Date: \_\_\_\_\_

Architect: \_\_\_\_\_ Date of Issuance: \_\_\_\_\_

Owner: ANCHORAGE SCHOOL DISTRICT  
1301 Labar Street  
Anchorage, Alaska 99515

**Project Description:**

The work performed under this contract has been reviewed and found to be substantially complete. The date of Substantial Completion is hereby established as: \_\_\_\_\_

**Definition of Date of Substantial Completion:**

The date of substantial completion of the project is the date certified by the Owner when the work is substantially complete in accordance with, and defined in the Contract Documents.

A list of items to be completed or corrected, prepared by the Owner and verified and amended by the Architect is appended hereto. The failure to include any items or such list does not alter the responsibility of the Contractor to complete the project in accordance with the Contract Documents.

The Contractor will complete or correct the work on the list of items appended hereto within 30 days from the date of substantial completion.

The responsibilities of the Owner and the Contractor for maintenance, heat, utilities, and insurance shall be as follows: \_\_\_\_\_

In reliance upon the certification of the Contractor and the Architect, the Owner hereby accepts the project as substantially complete. In accordance with the Contract Documents, the Owner hereby elects to assume occupancy of \_\_\_\_\_

\_\_\_\_\_ at \_\_\_\_\_ a.m./p.m. on  
\_\_\_\_\_.

Owner: **ANCHORAGE SCHOOL DISTRICT**

By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Architect: \_\_\_\_\_

By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor: \_\_\_\_\_

By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

ASD 101 (01/03)

**CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS  
ANCHORAGE SCHOOL DISTRICT**

WHEREAS, by the terms of a contract dated \_\_\_\_\_ entered into by the  
Anchorage School District, and \_\_\_\_\_ for the construction of

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

EXCEPTIONS:

IN WITNESS WHEREOF, the seal of the undersigned Contractor have been hereunto set this

day of

, at

By

being first duly sworn, say that I am the agent for and executed  
the foregoing under authority of said company to do so; that I have read the same, know the contents thereof, and the  
matters set forth therein are as I truly believe.

By

Subscribed and sworn to before me this \_\_\_\_\_ day of

, at \_\_\_\_\_

Notary Public in and for \_\_\_\_\_

My Commission Expires \_\_\_\_\_

RELEASE ON CONTRACT  
ANCHORAGE SCHOOL DISTRICT

WHEREAS, by the terms of a contract dated \_\_\_\_\_ entered into by the Anchorage School District, and \_\_\_\_\_ for the construction of

\_\_\_\_\_

it is provided that:

*"Neither the final payment nor the remaining retained percentage shall become due until the Contractor shall provide the Owner (1) with a waiver and release of liens, on the forms provided by the Owner, executed by the Contractor..."*

NOW THEREFORE, in consideration of the premises and the payment by the Anchorage School District to the undersigned Contractor of the amounts due under the contract and any changes or modifications thereto, to wit, the sum

of \$ \_\_\_\_\_ Dollars,  
(Numbers) (In Words)

the undersigned Contractor hereby releases and forever discharges the Anchorage School District including its property, particularly that real property known as the

\_\_\_\_\_

of the Anchorage School District, of and from all manner of debts, dues and sum or sums of money, accounts, claims, and demands whatsoever, in Law and in equity, under or by virtue of said contract, and warrants good title to all material, supplies and equipment installed or incorporated in the project and all work delivered to the premises, together with all improvements and appurtenances constructed thereon by:

\_\_\_\_\_ to the Anchorage School District free of any claims, liens or encumbrances. Neither the undersigned nor any person, firm or corporation furnishing material or labor for any work covered by this Contract has any right to a lien upon the premises nor improvement thereon, except:

-

\_\_\_\_\_

IN WITNESS WHEREOF, the signature of the undersigned Contractor has been hereunto set this

\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, at \_\_\_\_\_, Alaska.

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

Printed Name: \_\_\_\_\_

I, \_\_\_\_\_, being first duly sworn, say that I am the agent for and executed the foregoing under authority of said company to do so; that I have read the same, know the contents thereof, and the matters set forth therein are as I truly believe.

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

Subscribed and sworn to before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, at \_\_\_\_\_, Alaska.

Notary Public in and for \_\_\_\_\_

My Commission Expires: \_\_\_\_\_.

CONSENT OF SURETY COMPANY  
TO FINAL PAYMENT

PROJECT: \_\_\_\_\_

PROJECT NUMBER: \_\_\_\_\_

CONTRACTOR: \_\_\_\_\_

CONTRACT DATE: \_\_\_\_\_

TO: Anchorage School District

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above:

\_\_\_\_\_ (Surety Company)

on bond of

\_\_\_\_\_ (Contractor)

hereby approves of the final payment to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety Company of any of its obligations to Anchorage School District, Owner as set forth in said Surety Company's bond. Surety expressly agrees that any and all valid claims of sub-Contractors and all persons supplying labor or materials to the project will be satisfied by Contractor or Surety in a timely manner

IN WITNESS WHEREOF, the Surety Company has hereunto set its hand this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

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

Attest

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

\_\_\_\_\_  
Title

**CONSENT OF SURETY TO REDUCTION IN OR PARTIAL RELEASE OF RETAINAGE  
ANCHORAGE SCHOOL DISTRICT**

**PROJECT:**

**PROJECT NUMBER:**

**TO: Anchorage School District**

**CONTRACT DATE:**

**CONTRACTOR:**

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above,  
the:

\_\_\_\_\_ (Surety Company)

on bond of

\_\_\_\_\_ (Contractor)

**HEREBY APPROVES OF THE REDUCTION IN OR PARTIAL RELEASE OF RETAINAGE** to the Contractor  
as follows:

The surety agrees that such reduction in or partial release of retainage to the Contractor shall not relieve the  
Surety of any of its obligations to **ANCHORAGE SCHOOL DISTRICT, OWNER**

**IN WITNESS WHEREOF**, the Surety Company has hereunto set its hand this  
day of .


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

**Attest**

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

\_\_\_\_\_  
Title

ASDF Form 105

		<h2 style="margin: 0;">CERTIFICATE OF LIABILITY INSURANCE</h2>		DATE (MM/DD/YYYY)
PRODUCER		THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.		
INSURED		INSURERS AFFORDING COVERAGE INSURER A: INSURER B: INSURER C: INSURER D: INSURER E:	NAIC #	

**COVERAGES**

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR ADD'L LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS
	GENERAL LIABILITY <input type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS MADE <input type="checkbox"/> OCCUR  GEN'L AGGREGATE LIMIT APPLIES PER: <input type="checkbox"/> POLICY <input type="checkbox"/> PRO.JECT <input type="checkbox"/> LOC				EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$
	AUTOMOBILE LIABILITY <input type="checkbox"/> ANY AUTO <input type="checkbox"/> ALL OWNED AUTOS <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS <input type="checkbox"/> NON-OWNED AUTOS				COMBINED SINGLE LIMIT (Ea accident) \$  BODILY INJURY (Per person) \$  BODILY INJURY (Per accident) \$  PROPERTY DAMAGE (Per accident) \$
	GARAGE LIABILITY <input type="checkbox"/> ANY AUTO				AUTO ONLY - EA ACCIDENT \$ OTHER THAN AUTO ONLY: EA ACC \$ AGG \$
	EXCESS / UMBRELLA LIABILITY <input type="checkbox"/> OCCUR <input type="checkbox"/> CLAIMS MADE  <input type="checkbox"/> DEDUCTIBLE RETENTION \$				EACH OCCURRENCE \$ AGGREGATE \$ \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under SPECIAL PROVISIONS below Y/N <input type="checkbox"/>				WC STATU-TORY LIMITS OTH-ER E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
	OTHER				
DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES / EXCLUSIONS ADDED BY ENDORSEMENT / SPECIAL PROVISIONS					

<p><b>CERTIFICATE HOLDER</b></p>	<p><b>CANCELLATION</b></p> <p>SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING INSURER WILL ENDEAVOR TO MAIL _____ DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO DO SO SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE INSURER, ITS AGENTS OR REPRESENTATIVES.</p> <p>AUTHORIZED REPRESENTATIVE</p>
----------------------------------	---

**IMPORTANT**

If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

**DISCLAIMER**

This Certificate of Insurance does not constitute a contract between the issuing insurer(s), authorized representative or producer, and the certificate holder, nor does it affirmatively or negatively amend, extend or alter the coverage afforded by the policies listed thereon.

ACORD 25 (2009/01)

**Anchorage School District**

**REQUEST FOR INFORMATION**

Facilities Maintenance  
1301 Labar Street  
Anchorage, Alaska 99515

Phone: (907) 348-5215  
Fax: (907) 348-5227

No.

**TITLE:**

**DATE:**

**PROJECT:**

**Project No.:**

**TO:**

**REQUEST:**

**ANSWER:**

**Answered By:** \_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

**This is not an authorization to proceed with any work involving additional cost and / or time.**  
Notification must be given in accordance with Contract Documents if any clarification, variation or Architects/Engineers responses cause any change to the Contract Documents.

**ANCHORAGE SCHOOL DISTRICT USE ONLY:**  
Reviewed By: \_\_\_\_\_

Is this Request for Information associated with an Request for Proposal?  
Yes \_\_\_\_ No \_\_\_\_

Signed: \_\_\_\_\_ Date: \_\_\_\_\_  
Project Manager

Request for Proposal #



Capital Planning & Construction  
 1301 Labar St  
 Anchorage, Alaska 99515  
 Phone: (907) 348-5284  
 Fax: (907) 348-5227

Project:

**PCO #XXX**

**Prime Contract Potential Change Order #XXX: Name**

TO:	FROM:
PCO NUMBER/REVISION:	CONTRACT:
REQUEST RECEIVED FROM:	CREATED BY:
STATUS:	CREATED DATE:
REFERENCE:	PRIME CONTRACT CHANGE ORDER:
FIELD CHANGE:	CHANGE ORDER REQUEST:
LOCATION:	ACCOUNTING METHOD:
SCHEDULE IMPACT:	PAID IN FULL:
CHANGE REASON:	TOTAL AMOUNT:

**Within seven (7) days, submit an itemized proposal.**

Provide labor, material, equipment, and supervision necessary to complete changes to project as represented by the documentation indicated below. The quoted price shall include all direct and indirect costs (additive and deductive) associated with and resulting from this work, per the General Conditions of the Contract. Provide lump sum proposal properly itemized and supported by sustaining data to permit evaluation. The quoted price shall be considered full compensation and include all delay, impact, and actual cost associated with the resulting changes from this extra work.

POTENTIAL CHANGE ORDER DESCRIPTION: *(The Contract Is Changed As Follows)*

ATTACHMENTS:

APPROVAL

By: _____	Date _____	By: _____	Date _____
Project Manager		Contractor	
By: _____		By: _____	
Construction Supervisor		Senior Director of CP&C	
Date: _____	Required if amount exceeds \$10,000	Date: _____	Required if amount exceeds \$50,000

CERTIFICATE OF COMPLIANCE

No final payment shall be made until the Contractor shall file with the Owner, prior to acceptance of the work, a notarized Certification of Compliance in the following form:

The Contractor does hereby certify that all work has been performed and materials supplied in accordance with the Drawings, Specifications and Contract Documents for the above work, and that:

No less than the prevailing rates of wages as ascertained by the governing body of the Contracting Agency has been paid to laborers, workmen and mechanics employed on this work;

There have been no unauthorized substitutions of Subcontractors; nor have any subcontracts been entered into without prior notice having been submitted to the Owner prior to the start of such subcontracted work;

No subcontract was assigned or transferred or performed by any Subcontractor other than the original Subcontractor, without prior notice having been submitted to the Owner together with the names of all Subcontractors;

All claims for material and labor and other paid service performed in connection with these specifications have been paid;

All monies due the State Industrial Accident Fund, the State Unemployment Compensation Trust Fund, the State Tax Commission, Hospital Associations and/or others have been paid.

In WITNESS WHEREOF, the undersigned has signed and sealed this instrument this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(Firm Name)  
\_\_\_\_\_  
(Signature)  
\_\_\_\_\_  
(Title)

(Attest)

(SEAL IF BIDDER IS A CORPORATION)

As determined necessary, evidence of compliance may be required to be submitted with and made a part of this Certificate of Compliance.

WARRANTY OF WORK

Prior to Final Payment, the Contractor shall furnish to the Owner a Warranty of Work in the following form:

The Contractor does hereby warrant all work and materials to be in full and complete accordance with the Contract Documents and Agreement between Owner and Contractor, and requirements appertaining thereto; that all work and materials are free from any and all defects and imperfections, and fully suitable for the use and purposes for which each and every part is intended. The Contractor also agrees that, should any defect develop or appear which the Project Manager or Owner's Representative finds was Not caused by improper use, the Contractor shall promptly, upon demand, fully correct, substitute and make good any such defective material without any cost to the Owner and will save the Owner harmless against any claim, demand, loss or damage by reason of any breach of this warranty.

The period of this warranty shall commence on the date of Substantial Completion.

The warranty shall continue to be in full force and effect for the period of one (1) year, except for those items for which a longer period of warranty is specifically stated in the Warranties for work in Technical Sections of the Specifications.

Warranties for work stated in Technical Section shall continue in full force and effect for the respective periods expressly stated.

In WITNESS WHERE, the undersigned has signed and sealed this instrument this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(Firm Name)  
\_\_\_\_\_  
(Signature)  
\_\_\_\_\_  
(Title)

(Attest)

(SEAL IF BIDDER IS A CORPORATION)

## AHERA Exclusion Document

### Contractor's Verification of Asbestos-Free Construction

Project: \_\_\_\_\_ Project Number: \_\_\_\_\_

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

To: Anchorage School District  
Facilities Coordinator,  
AHERA LEA Designated Person

To the best of our knowledge, no asbestos-containing building materials were installed in this project.

Attest: \_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Title



Capital Planning & Construction  
 1301 Labar St  
 Anchorage, Alaska 99515  
 Phone: (907) 348-5264  
 Fax: (907) 348-5227

**PCCO #XXX**

Project:

**Prime Contract Change Order #XXX:**

TO:	FROM:
DATE CREATED:	CREATED BY:
CONTRACT STATUS:	REVISION:
DESIGNATED REVIEWER:	REVIEWED BY:
DUE DATE:	REVIEW DATE:
CONTRACTUAL COMPLETION DATE:	
SCHEDULE IMPACT:	EXECUTED:
CONTRACT FOR:	TOTAL AMOUNT:
DESCRIPTION:	
ATTACHMENTS:	

CHANGE ORDER REQUESTS IN THIS CHANGE ORDER:

COR #	Issue	Description	Cost
TOTAL:			\$ 0.00

CHANGE ORDER LINE ITEMS: reason

Original contract sum	\$
Previously authorized change orders	\$
Previous contract amount	\$
Current change order amount	\$
New contract sum	\$
Percent of original contract sum	

Contractor \_\_\_\_\_ DATE \_\_\_\_\_

Senior Director of Purchasing/Warehouse \_\_\_\_\_ DATE \_\_\_\_\_

SAMPLE FORMS AND CERTIFICATES

Division 0  
Section 00630

CONTRACTOR'S QUALITY CONTROL REPORT (CQC)		DATE	REPORT NO.
CONTRACT NO. AND NAME OF CONTRACTOR		DESCRIPTION AND LOCATION OF THE WORK:	
WEATHER CLASSIFICATION:		CLASSIFICATION:	
CLASS A	No interruption of any kind from weather conditions occurring on this or previous shifts.	CLASS _____	
CLASS B	Weather occurred during this shift that caused a complete stoppage of all work.	TEMPERATURE:	
		MAX _____ MIN _____	
CLASS C	Weather occurred during this shift that caused a partial stoppage of work.	PRECIPITATION:	
CLASS D	Weather overhead excellent or suitable during shift. Work completely stopped due to results of previous adverse weather.	INCHES _____	
CLASS E	Weather overhead excellent or suitable during shift but work partially stopped due to previous adverse manner.		
OTHER	Explain.		
CONTRACTOR/SUBCONTRACTORS AND AREA OF RESPONSIBILITY FOR WORK PERFORMED TODAY: (Attach list of items of equipment either idle or working as appropriate.)			
a. _____			
b. _____			
c. _____			
d. _____			
e. _____			
f. _____			
g. _____			
h. _____			
1. WORK PERFORMED TODAY: (Indicate location and description of work performed. Refer to work performed by prime and/or subcontractors by letter in Table above. )			
2. TYPE AND RESULTS OF INSPECTION: (Indicate whether P-Preparatory, I-Initial, or F-Follow-up and include satisfactory work completed or deficiencies with action to be taken.)			

3. TESTS REQUIRED BY PLANS AND/OR SPECIFICATIONS PERFORMED AND RESULTS OF TESTS:
4. QUALITY CONTROL REPORTS (items requiring special inspections):
5. VERBAL INSTRUCTIONS RECEIVED: (List any instructions given by Owner on construction deficiencies, retesting required, etc., with action to be taken.)
6. REMARKS: (Cover any conflicts in plans, specification or instructions: acceptability of incoming materials; offsite surveillance activities; progress of work, delays, causes and extent thereof; days of no work with reasons for same.)
CONTRACTOR'S CERTIFICATION: I certify that the above report is complete and correct and that all material and equipment used, work performed and tests conducted during this reporting period were in strict compliance with the contract plans and specifications except as noted above.  <p style="text-align: right;">_____ CONTRACTOR'S APPROVED AUTHORIZED REPRESENTATIVE</p>

Department of Labor and Workforce Development  
Labor Standards and Safety Division  
Wage and Hour Administration  
www.labor.state.ak.us/lss/lss.htm

- This form must be typed or printed in ink.
- Fill in all blanks or form will be returned for correction (see back).
- Please allow a minimum of 10 working days for processing.

ENTER YOUR FAX # \_\_\_\_\_  
AND LIST YOUR MAILING ADDRESS BELOW

Contractor, company or agency name, address, city, state & ZIP + 4

## NOTICE OF WORK

### Filing Fee Required

Project name	
Specific site description	
Contract awarding agency	
Address	
City	State ZIP + 4
Contract awarding agency contact person Phone #	
Location and city where work is to be performed	
Date work to begin (m/d/y)	Do you intend to use subcontractors? <input type="checkbox"/> Yes <input type="checkbox"/> No
Final Bid Date	Contract #

Primary contractor (has contract with the public agency)		
List all contractors & subcontractors (Attach extra sheet if necessary)	Type of work	Amount of subcontract

**CERTIFICATION:** I hereby certify that the above information is correct. Enclosed is the filing fee computed at 1% of the total amount of all my subcontractors on this project. This amount includes the contract value for the primary contractor. I understand that the maximum fee I am required to pay is \$5,000. I further certify that all contractors shall be made aware of the requirements of AS 36.05.010 - .110 and AS 36.10.007 - .990 before working.

Total value of subcontracts	\$
	+
Value of work performed by primary contractor	\$
Amount subject to fee	\$
	<b>Multiply by .01</b>
<b>Total fee enclosed =</b>	<b>\$</b>
<b>ROUND FEES TO NEAREST DOLLAR</b>	

Signature \_\_\_\_\_ Date \_\_\_\_\_  
Title \_\_\_\_\_  
Fax # \_\_\_\_\_ Phone # \_\_\_\_\_

For Dept. Use Only

Accepted:

By \_\_\_\_\_  
Department of Labor and Workforce Development

For Dept. Use Only

Amount: \_\_\_\_\_ Check Number: \_\_\_\_\_ Cash \_\_\_\_\_  
Received By: \_\_\_\_\_ Date: \_\_\_\_\_  
Credit Card Confirmation \_\_\_\_\_  
Visa \_\_\_\_\_ MC \_\_\_\_\_  
Project Name \_\_\_\_\_  
DOLWD Project # \_\_\_\_\_

Wage & Hour date-stamped copy of this form will serve as temporary receipt.

## **How to expedite the processing of your form:**

**Acceptance of this notice will be based on the information provided by the primary contractor.**

### **ERRORS THAT CAUSE REJECTION**

No fee included or incorrect amount. If total contract amount is less than \$25,000 no filing fee is required. Contract amounts paid to owner/operators with no employees are exempt from the fee. **The maximum total filing fee for any one project is \$5,000.00.**

Missing – Enter the “time and materials” if applicable. The exact dollar amount will be required on the Notice of Completion to be filed when the project is done.

Missing – The name of each subcontractor and the amount or estimated amount of the subcontract is required. Enter the “time and materials” if applicable. The exact dollar amount will be required on the Notice of Completion to be filed when the project is done.

Missing – Notice of Work must be signed by an authorized representative.

### **FILING INSTRUCTIONS**

If there is not enough space to list all contractor/subcontractor information, attach additional sheets.

A Wage and Hour Administration (WH) date-stamped copy of this form will serve as a temporary receipt, while the acceptance of fees is processed. WH will mail or fax the accepted copy of this notice to the organization provided on the front of this form. Make a copy for your records. This will serve as your notice that the fees paid have been accepted by WH.

For questions call the nearest WH office:

Juneau: (907) 465-4842      Anchorage: (907) 269-4900      Fairbanks: (907) 451-2886

For more forms, see [www.labor.state.ak.us/lss/lssforms.htm](http://www.labor.state.ak.us/lss/lssforms.htm)

Submit the notice and the appropriate filing fee to:

Alaska Department of Labor and Workforce Development  
Wage and Hour Administration  
P.O. Box 107021  
Anchorage, AK 99510-0721

If no fee is required, you may fax the notice to (907) 269-4915

**Alaska Department of Revenue  
TAX CLEARANCE REQUEST FORM**

**Applicant's Name:** \_\_\_\_\_

**EIN/SSN:** \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

**City/State/Zip Code:** \_\_\_\_\_

I hereby authorize the Alaska Department of Revenue to release to

\_\_\_\_\_  
(Name of Department or Agency)

Department's Statute on tax clearance: \_\_\_\_\_

whose facsimile number or email address is \_\_\_\_\_

confirmation that all taxes, penalties and interest due the Department of Revenue have been paid and that there are no outstanding amounts due.

**Signed:** \_\_\_\_\_

**Printed Name:** \_\_\_\_\_

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

\*If tax clearance is being requested on behalf of a corporation/LLC/partnership, must be signed by an officer/member/partner.

Send completed form by email to the Department of Revenue at [DOR.tax.accounting@alaska.gov](mailto:DOR.tax.accounting@alaska.gov)

<i>DEPARTMENT USE ONLY</i>	
<input type="checkbox"/>	<i>The above applicant is current on all taxes, penalties and interest due and is in good standing with the Alaska Department of Revenue.</i>
<input type="checkbox"/>	<i>The above applicant is not current on all taxes, penalties and interest due and is not in good standing with the Alaska Department of Revenue.</i>
_____ <i>Department of Revenue Representative</i>	_____ <i>Date</i>

TaxClearanceRequestForm (Rev 2/21)



THE STATE  
of ALASKA  
GOVERNOR MICHAEL J. DUNLEAVY

Department of Labor and Workforce  
Development

Division of Employment and Training Services  
Employment Security Tax

P.O. Box 115509  
Juneau, AK 99811-5509  
Relay Alaska (in state): (800) 770-8973 or 7.1.1  
Relay Alaska (out of state): (800) 770-8255  
Toll free: (888) 448-2937  
Phone: (907) 465-2787  
Fax: (907) 465-2374

**Tax Clearance Request Form for Contractors**

Date of request: \_\_\_\_\_

Business name of the contractor a Tax Clearance is being requested for: \_\_\_\_\_

\_\_\_\_\_

Business address: \_\_\_\_\_

Business contact phone number: \_\_\_\_\_

Federal Identification Number: \_\_\_\_\_

Alaska Employer Account Number: \_\_\_\_\_

Specific time period a tax clearance is being requested for (i.e. beginning and ending date of a subcontract agreement):

\_\_\_\_\_

Subcontract project name: \_\_\_\_\_

\_\_\_\_\_

Name and address of the person this Tax Clearance is to be returned to: \_\_\_\_\_

\_\_\_\_\_

Comments or additional information: \_\_\_\_\_

\_\_\_\_\_

For agency use only:

- Tax Clearance is granted
- Tax Clearance is not granted (please have employer contact the department)
- No account on file, liability unknown (please have employer contact the department)
- Employer has stated no employees, Tax Clearance not required.

Agency representative signature: \_\_\_\_\_ Date: \_\_\_\_\_

Agency representative title: \_\_\_\_\_

We are an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities. [labor.alaska.gov/estax](http://labor.alaska.gov/estax)

Rev. 8/2018

**Submittal Control Form**

**Project Title:** \_\_\_\_\_ **Project No:** \_\_\_\_\_  
**Contract No:** \_\_\_\_\_

**Contractor:** \_\_\_\_\_ **Submittal No.** \_\_\_\_\_

**Address:** \_\_\_\_\_ **New Submittal**  
\_\_\_\_\_ **Resubmittal**

**Contact:** \_\_\_\_\_

**Telephone:** \_\_\_\_\_

**Fax:** \_\_\_\_\_

---

Submittal is as Specified?	Yes	No
2. Revision Number:	_____	
3. Submittal Control No.:	_____	
4. Description:	_____ _____ _____	
5. Spec. Section/Dwg Ref.:	_____	
Number of Copies:	_____	

**Remarks:**

---

**Review is for general design or arrangement only. Not for quality, dimension or fit.**

\_\_\_\_\_  
**Submitted By**

\_\_\_\_\_  
**Date**

Forwarded for Design Review: \_\_\_\_\_  
Date

\_\_\_\_\_  
**ASD Reviewed / Forwarded By**

**Review Stamp**

**STATE of ALASKA SEX OFFENDER/CHILD KIDNAPPER  
REGISTRY  
CONTRACTOR CERTIFICATION**

Pursuant to Article 1, Subparagraph 1.02, of the Instructions to Bidders, Specification Section 00100, I \_\_\_\_\_ the undersigned Principal for \_\_\_\_\_ on Solicitation No. \_\_\_\_\_, certify:

1. that I, either personally or through a person designated by me, have researched the State of Alaska Sex Offender/Child Kidnapper Registry to confirm that no employee or agent who may enter Anchorage School District property in connection with the contract is listed in the Registry.

2. that I have required all subcontractors and any of their sub-subcontractors to certify, or will require all subcontractors and any of their sub-subcontractors to certify, that they researched the State of Alaska Sex Offender/Child Kidnapper Registry to confirm that no employee or agent who may enter district property in connection with the contract is listed in the Registry. I will provide all such certifications to the district on request.

3. To my knowledge, no employee or agent of bidder, or any sub-contractor or sub-sub-contractor of bidder, who may enter district property in connection with the contract is: (a) listed in the sex offender/child kidnapper registry of any other state; or, (b) is a convicted sex offender or child kidnapper.

4. I have read district Board Policy 3515.5 and certify that the bidder will comply with Board Policy 3515.5. The bidder will not send any employee or agent who is a sex offender or child kidnapper to district property, as that term is defined in Board Policy 3515.5.

By: \_\_\_\_\_  
Signature Printed Name

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

Dated: \_\_\_\_\_

Revised April 4, 2018

**STATE of ALASKA SEX OFFENDER/CHILD KIDNAPPER  
REGISTRY  
SUBCONTRACTOR CERTIFICATION**

Pursuant to Article 1, Subparagraph 1.02, of the Instructions to Bidders, Specification Section 00100, I \_\_\_\_\_ the undersigned Principal for \_\_\_\_\_ on Solicitation No. \_\_\_\_\_, certify:

1. that I, either personally or through a person designated by me, have researched the State of Alaska Sex Offender/Child Kidnapper Registry to confirm that no employee or agent who may enter Anchorage School District property in connection with the contract is listed in the Registry.

2. that I have required all subcontractors and any of their sub-subcontractors to certify, or will require all subcontractors and any of their sub-subcontractors to certify, that they researched the State of Alaska Sex Offender/Child Kidnapper Registry to confirm that no employee or agent who may enter district property in connection with the contract is listed in the Registry. I will provide all such certifications to the district on request.

3. that if my company enters into an agreement to perform work as a Subcontractor for \_\_\_\_\_ the General Contractor for the district under Solicitation No. \_\_\_\_\_, my company will not allow any worker whose name appears on the State of Alaska Sex Offender/Child Kidnapper Registry to perform work on or at the Project site.

By: \_\_\_\_\_  
Signature Printed Name

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

Dated: \_\_\_\_\_

Revised April 21, 2015

**STATE of ALASKA SEX OFFENDER/CHILD KIDNAPPER  
REGISTRY  
SUB-SUBCONTRACTOR CERTIFICATION**

Pursuant to Article 1, Subparagraph 1.02, of the Instructions to Bidders, Specification Section 00100, I \_\_\_\_\_ the undersigned Principal for \_\_\_\_\_ on Solicitation No. \_\_\_\_\_, certify:

1. that I, either personally or through a person designated by me, have researched the State of Alaska Sex Offender/Child Kidnapper Registry to confirm that no employee or agent who may enter Anchorage School District property in connection with the contract is listed in the Registry.

2. that if my company enters into an agreement to perform work as a Sub-subcontractor for \_\_\_\_\_ a Subcontractor for the General Contractor for the district under Solicitation No. \_\_\_\_\_, my company will not allow any worker whose name appears on the State of Alaska Sex Offender/Child Kidnapper Registry to perform work on or at the Project site.

By: \_\_\_\_\_  
Signature Printed Name

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

Dated: \_\_\_\_\_

Revised April 21, 2015



ANCHORAGE SCHOOL DISTRICTS'  
LIST OF

ALASKAN FEDERALLY REGISTERED APPRENTICESHIP PROGRAMS

Program Number	Program Name	Program Status	Address	Occupation Title
A000103402	Intelligent Design, LLC	Registered	11741 Timberlane Drive Anchorage AK 99515	ELECTRICIAN
A0001070022	HE ELECTRIC, INCORPORATED	Registered	P.O. BOX 3123 SOLDOTNA AK 99669	ELECTRICIAN
A0001060015	Satlow Holdings	Registered	2000 E. 80TH AVENUE ANCHORAGE AK 99507	ELECTRICIAN
A0001135729	KO Electric, LLC	Registered	P.O. Box 5556 Homer AK 99603	ELECTRICIAN
A0001125337	Laker Electric, Incorporated	Registered	11901 Industry Way Anchorage AK 99511	ELECTRICIAN
A0001135718	Luxwire Electric, LLC	Registered	1534 Town Way A Kenai AK 99611	ELECTRICIAN
2018-AK-70830	Maddox Electric	Suspended	P.O. Box 2226 Seward AK 99664	ELECTRICIAN
2019-AK-73163	Mainline Electric	Registered	P.O. Box 927 Seward AK 99664	ELECTRICIAN
A000147461	Marathon Electric, LLC	Registered	951 E. Creekside Drive, #9 Wasilla AK 99654	ELECTRICIAN
A000070010	Mark V Enterprises	Registered	1265 EAST LOLLY CIRCLE WASILLA AK 99654	ELECTRICIAN
2019-AK-73045	MAT-SU MECHANICAL, INC.	Registered	P.O. Box 788 Peirerburg AK 99833	ELECTRICIAN
A000990007	MIDNIGHT SUN ELECTRIC	Registered	267 West Rockwell Avenue SOLDOTNA AK 99669	ELECTRICIAN
A0001060018	MIRANDA ELECTRIC, INCORPORATED	Registered	P.O. Box 56031 North Pole AK 99705	ELECTRICIAN
A000145924	Moore Construction	Registered	7362 West Parks Highway, #189 Wasilla AK 99623	ELECTRICIAN
2017-AK-69070	New Hope Apprenticeship Training	Registered	2421 West Topline Drive Wasilla AK 99654	ELECTRICIAN
A000125657	North Wire, LLC	Registered	806 S. Nordic Drive Petersburg AK 99833	ELECTRICIAN
2017-AK-65477	Peak Offield Service Company - Bristol Bay Industrial	Registered	1130 E. Huffman Road, Suite 24, Box 6905 Anchorage AK 99515	ELECTRICIAN
A000060013	PITCHER ELECTRIC, INC.	Registered	5015 Business Park Blvd., Suite 4000 Anchorage AK 99503	ELECTRICIAN
A000125710	Power & Light, Incorporated	Registered	P.O. BOX 877871, WASILLA AK 99687	ELECTRICIAN
A0001125704	Premier Electric	Registered	7721 School Street, Suite 1, Anchorage AK 99518	ELECTRICIAN
A000113407	Prism Design & Construction	Registered	P.O. Box 674362 Wasilla AK 99687	ELECTRICIAN
A000113359	Puffin Electric, Inc.	Registered	P.O. Box 670162 Wasilla AK 99687	ELECTRICIAN
A000080232	Ray Electric, Inc.	Registered	3308 Ben Whalers Lane Homer AK 99603	ELECTRICIAN
2018-AK-70871	Renewable Energy Systems	Registered	1698 Airport Way Fairbanks AK 99701	ELECTRICIAN
A000140007	RISING SON ELECTRIC SERVICES, LLC	Registered	36784 Ekurna Lake Road Chugiak AK 99567	ELECTRICIAN
A000113405	Safe-T-Way Electric, Incorporated	Registered	6208 Miskley Street Anchorage AK 99518	ELECTRICIAN
A000050009	Salmon River Electric	Registered	P.O. Box 118 Gustavus AK 99826	ELECTRICIAN
A0001472165	SITKA ELECTRIC COMPANY	Registered	1314 SAWMILL CREEK ROAD SITKA AK 99885	ELECTRICIAN
A0001108397	Soudough Speedily Contractors	Registered	145 Shady Lane, #4 Soldotna AK 99669	ELECTRICIAN
A0001157697	Spectrum Services	Registered	35867 Driftwater Street Kenai AK 99611	ELECTRICIAN
2017-AK-69038	Stevens Electric	Registered	9580 Mukelball Circle Anchorage AK 99507	ELECTRICIAN
A000103005	Stevens Electrical	Registered	2741 Enlelers Cutoff Road Juneau AK 99601	ELECTRICIAN
A000107008	SUMNER ELECTRICAL ENTERPRISE, LLC	Registered	6801 Hollywood Road Wasilla AK 99654	ELECTRICIAN
A000168009	TDX Power Services, LLC	Registered	815 East 82nd Avenue, Suite 200 Anchorage AK 99518	ELECTRICIAN
A000101001	TEC PRO, LTD.	Registered	815 Whitney Road Anchorage AK 99501	ELECTRICIAN
A000109508	The Electrician, LLC	Registered	1760 Abbott Road Anchorage AK 99507	ELECTRICIAN
A000145917	Thomas and Sons Electric	Registered	607 0th Steese Highway, Suite B, PMB 407 Fairbanks AK 99701	ELECTRICIAN
A0001147688	Trident Seafoods Corporation	Registered	P.O. Box 935 Craig AK 99921	ELECTRICIAN
A0001167016	Trinity Electric, LLC	Registered	P.O. Box 228427 Anchorage AK 99522	ELECTRICIAN
A000092469	US Construction, Incorporated	Registered	23201 Cool Croy Drive Fairbanks AK 99701	ELECTRICIAN
A000050017	Vanhey Electric	Registered	9107 W. Reliance Ind. Wasilla AK 99623	ELECTRICIAN
A000106009	WESTERN POWER ENGINEERING	Registered	P.O. BOX 303557 DUTCH HARBOR AK 99692	ELECTRICIAN
A0001125265	Will Curtis	Registered	P.O. BOX 302638 DUTCH HARBOR AK 99692	ELECTRICIAN
A000030002	WOODGORTH ELECTRIC	Registered	1495 Richardson Hwy Valdez AK 99686	ELECTRICIAN
A000093009	YUKON-KODIAK WITH DELTA APPRENTICESHIP PROGRAM	Registered	2300 Charles Clegg Homer AK 99603	ELECTRICIAN
A000093002	ABC Electric	Registered	P.O. BOX 963 BETHEL AK 99559	ELECTRICIAN
A000093003	ABC Electric	Registered	320 Divinity Street, Suite 2 Fairbanks AK 99701	ELECTRICIAN
A000030003	ABC Electric	Registered	314 Arctic Slope Anchorage AK 99518	ELECTRICIAN
A000030004	ABC Electric	Registered	324 15th Ave, Room 100 Anchorage AK 99501	ELECTRICIAN
A000030005	ABC Electric	Registered	P.O. BOX 12958 BIG LAKE AK 99653	ELECTRICIAN
A000030006	ABC Electric	Registered	5821 Arctic Boulevard, Unit 8 Anchorage AK 99518	ELECTRICIAN
A000030007	ABC Electric	Registered	2017 Mill Barn Road Kodiak AK 99615	ELECTRICIAN
A000030008	ABC Electric	Registered	301 Arctic Slope Avenue, Suite 100 Anchorage AK 99518	ELECTRICIAN
A000030009	ABC Electric	Registered	1501 Arctic Boulevard, Unit 8 Anchorage AK 99518	ELECTRICIAN
A000030010	ABC Electric	Registered	301 Arctic Slope Avenue, Suite 100 Anchorage AK 99518	ELECTRICIAN
A000030011	ABC Electric	Registered	1637 WEST POTTER DRIVE ANCHORAGE AK 99518	ELECTRICIAN
A000030012	ABC Electric	Registered	P.O. BOX 0889 PALMER AK 99645	ELECTRICIAN
A000030013	ABC Electric	Registered	3105 LAKESHORE BL, BUILDING A, STE 301 ANCHORAGE AK 99518	ELECTRICIAN
A000030014	ABC Electric	Registered	301 Arctic Slope Avenue, Suite 100 Anchorage AK 99518	ELECTRICIAN
A000030015	ABC Electric	Registered	2505 Barrow Street Anchorage AK 99503	ELECTRICIAN
A000030016	ABC Electric	Registered	8751 10th Street Anchorage AK 99515	ELECTRICIAN
A000030017	ABC Electric	Registered	301 Arctic Slope Avenue, Suite 100 Anchorage AK 99518	ELECTRICIAN

ANCHORAGE SCHOOL DISTRICT'S  
LIST OF  
ALASKAN FEDERALLY REGISTERED APPRENTICESHIP PROGRAMS

Program Number	Program Name	Program Status	Address	Occupation Title
A1000700215	ALASKA JOINT ELECTRICAL APPRENTICESHIP & TRAINING TRUST	Registered	5800 151 ANCHORAGE AK 99518	LINE MAINTAINER (Abramate Title - Line Worker)
A1000700204	ALASKA OPERATING ENGINEERS/EMPLOYERS TRAINING TRUST	Registered	P.O. BOX 0929 PALMER AK 99645	LINE MAINTAINER (Abramate Title - Line Worker)
A10001089690	Alaska Power & Telephone	Registered	P.O. Box 34105 Juneau AK 99803	LINE MAINTAINER (Abramate Title - Line Worker)
A1000870008	Alaska Village Electric Cooperative, Inc.	Registered	4831 Eagle Street Anchorage AK 99503	LINE MAINTAINER (Abramate Title - Line Worker)
A1000135205	CITY OF BOROUGHS OF SITKA - ELECTRICAL DEPARTMENT	Registered	105 JARVIS STREET SITKA AK 99835	LINE MAINTAINER (Abramate Title - Line Worker)
A1001060005	CITY OF WRANSELL WRANSELL MUNICIPAL LIGHT & POWER	Registered	P.O. Box 610 Unalakleet AK 99885	LINE MAINTAINER (Abramate Title - Line Worker)
A1001070010	ICE SERVICES, INCORPORATED	Registered	1064 Cade Avenue WRANSELL AK 99259	LINE MAINTAINER (Abramate Title - Line Worker)
A1001089978	North Slope Borough Power & Light	Registered	2605 C STREET, SUITE 228 ANCHORAGE AK 99503	LINE MAINTAINER (Abramate Title - Line Worker)
A100147462	Nushagak Electric & Telephone Cooperative, Inc.	Registered	P.O. Box 350 Dillingham AK 99576	LINE MAINTAINER (Abramate Title - Line Worker)
A1000720004	ALASKA OPERATING ENGINEERS/EMPLOYERS TRAINING TRUST	Registered	P.O. BOX 0929 PALMER AK 99645	LUBRICATION SERVICE MATERIAL DISPOSAL TECHNICIAN
A1000000006	ALASKA JOINT ELECTRICAL APPRENTICESHIP & TRAINING TRUST	Registered	5800 151 ANCHORAGE AK 99518	MAINTENANCE MECHANIC, TELEPHONE
A1000125893	ALASKA WORKS PARTNERSHIP, INC	Registered	1413 HYDER ST ANCHORAGE AK 99502	MAINTENANCE REPAIRER, BUILDING
A1000125889	Hiland Mountain Correctional Center	Registered	P.O. Box 977790 Wasilla AK 99587	MAINTENANCE REPAIRER, BUILDING
A10001900006	SPRING CREEK CORRECTIONAL CENTER	Registered	9101 Heinenberg Road Eagle River AK 99577	MAINTENANCE REPAIRER, BUILDING
A10001900010	Wildwood Correctional Center	Registered	P.O. BOX 2109 SEWARD AK 99664	MAINTENANCE REPAIRER, BUILDING
A10001910012	TECK ALASKA, INC.	Registered	BLOS 10, CHUGACH AVENUE KENA AK 99611	MAINTENANCE REPAIRER, BUILDING
A1000520001	Alaska Carpenters Training Trust	Registered	3105 LAKESHORE DR., BUILDING A, STE 101 ANCHORAGE AK 99516	MECHANIC, INDUSTRIAL TRUCK
A10001910012	TECK ALASKA, INC.	Registered	3105 LAKESHORE DR., BUILDING A, STE 101 ANCHORAGE AK 99516	MILLWRIGHT
A1000910003	ALASKA OPERATING ENGINEERS/EMPLOYERS TRAINING TRUST	Registered	P.O. BOX 0929 PALMER AK 99645	OPERATING ENGINEER
A1000720004	ALASKA OPERATING ENGINEERS/EMPLOYERS TRAINING TRUST	Registered	P.O. BOX 0929 PALMER AK 99645	OPERATING ENGINEER
A100147462	Wolverine Supply, Inc.	Registered	5099 E. Blue Lignite Drive Wasilla AK 99654	OPERATING ENGINEER
A1000910003	ABC of Alaska, Inc.	Registered	301 Arctic Slope Avenue, Suite 100 ANCHORAGE AK 99518	PAINTER (Construction)
A1000490001	International Union of Painters and Allied Trades Local 1959 IATC	Registered	5821 Arctic Boulevard, Unit B ANCHORAGE AK 99518	PAINTER (Construction)
A1000910003	ABC of Alaska, Inc.	Registered	301 Arctic Slope Avenue, Suite 100 ANCHORAGE AK 99518	PIPE FITTER (Construction)
A1000490002	ANCHORAGE ALASKA AREA PIPE TRADES LOCAL #367 IATC	Registered	617 WEST POTTER DRIVE ANCHORAGE AK 99518	PIPE FITTER (Construction)
A1001510002	Fairbanks Area Plumbers & Pipefitters IATC	Registered	1978 BURGESS AVENUE FAIRBANKS AK 99709	PIPE FITTER (Construction)
A1000660001	JUNEAU PLUMBERS IATC	Registered	1751 ANNA STREET JUNEAU AK 99801	PIPE FITTER (Construction)
A1000790017	Alaska Towel Traders IATC	Registered	825 East 8th Avenue, Suite 10 Anchorage AK 99501	PLASTERER
A10001982770	907 Heating and Plumbing	Registered	P.O. Box 220032 Anchorage AK 99522	PLUMBER
A1000125246	Ace Heating, Inc.	Registered	2780 N. Heathermay Circle Wasilla AK 99654	PLUMBER
A10001089507	AI Fish Plumbing, LLC	Registered	11805 Gregory Road Anchorage AK 99516	PLUMBER
A1000125896	Alaska Clearwater Mechanical, LLC	Registered	4500 Diplomay Drive, Suite 454 Anchorage AK 99508	PLUMBER
A1000119342	Alaska Native Tribal Health Consortium, Division of Environmental Health & Engineering	Registered	2760 N. Heathermay Circle Wasilla AK 99654	PLUMBER
A10001090011	ALASKA PLUMBING & HEATING	Registered	P.O. Box 709 Willow AK 99888	PLUMBER
A1000135908	AI American Plumbing & Heating	Registered	P.O. Box 210240 Auke Bay AK 99821	PLUMBER
A1000157959	AI Star Plumbing & Heating, LLC	Registered	9509 Antler Way Juneau AK 99801	PLUMBER
A1000170007	ALWAYS ON CALL MOUNTAIN MECHANICAL CORPORATION	Registered	8427 MENTHA STREET ANCHORAGE AK 99518	PLUMBER
A1000490002	ANCHORAGE ALASKA AREA PIPE TRADES LOCAL #367 IATC	Registered	617 WEST POTTER DRIVE ANCHORAGE AK 99518	PLUMBER
A1000720016	ANCHORAGE PLUMBING & HEATING SERVICES, LLC	Registered	7500 King Street ANCHORAGE AK 99518	PLUMBER
A10001090015	APPEX PLUMBING & HEATING SERVICES, LLC	Registered	13087 E. Jessica Ann Street Sutton AK 99674	PLUMBER
A1000081112	Arctic Chain Plumbing & Heating, Inc.	Registered	1200 East 76th Avenue, Unit 1220 Anchorage AK 99518	PLUMBER
037-AK-68554	Arctic Plumbing & Heating, LLC	Registered	2125 Richardson Highway, Suite #2, North Pole AK 99705	PLUMBER
0319-AK-72500	Bredley Mechanical Company	Registered	2125 Richardson Highway North Pole AK 99705	PLUMBER
A1000146522	Blades Mechanical	Registered	148 Hillcrest Avenue, #2 Subotina AK 99669	PLUMBER
A1000146521	Bolleman Plumbing & Heating, Inc.	Registered	1900 Unadome Drive Palmer AK 99645	PLUMBER
A1000135713	BOYMAN MECHANICAL CONTRACTORS, INC	Registered	311 1/2 St. Johns Street Anchorage AK 99503	PLUMBER
A1000135713	Circle Plumbers, Incorporated	Registered	331 1/2 St. Johns Street Anchorage AK 99503	PLUMBER
A1000202237	Circle Plumbers, Incorporated	Suspended	331 1/2 St. Johns Street Anchorage AK 99503	PLUMBER
A1001135717	D.H. Plumbing & Heating, Incorporated	Suspended	7741 Long Street Anchorage AK 99518	PLUMBER
A1000127700	Delaco Plumbing & Heating, Incorporated	Registered	64525 PITTMAN AVE Homer AK 99603	PLUMBER
A1000147690	Dawson Construction, Incorporated	Registered	4220 Cambria Drive West Kenichian AK 99001	PLUMBER
A1000167004	DRVAL MECHANICAL, INC.	Registered	995 BILEY COURT FAIRBANKS AK 99701	PLUMBER
A10001086555	Earns Plumbing & Heating, LLC	Registered	P.O. Box 233664 Anchorage AK 99523	PLUMBER
A10001040029	ENCORE MECHANICAL, INC.	Registered	1308 Lakeshore Drive Homer AK 99603	PLUMBER
A10001135716	Extreme Heating & Air, Incorporated	Registered	16905 Farm Avenue Eagle River AK 99577	PLUMBER
A10001510002	Fairbanks Area Plumbers & Pipefitters IATC	Registered	1578 BURGESS AVENUE FAIRBANKS AK 99709	PLUMBER
A10001465206	Fedor's Plumbing & Heating, LLC	Registered	5502 Cordova Street Anchorage AK 99518	PLUMBER
A1000125882	Funk Services	Registered	P.O. Box 672188 Chukotka AK 99567	PLUMBER
A1000135591	Glacier Point Services	Registered	P.O. Box 61337 Fairbanks AK 99706	PLUMBER
A1000135912	H and M Plumbing & Heating, Inc.	Registered	P.O. Box 222225 Anchorage AK 99522	PLUMBER
A1000400027	HARDROCK PLUMBING AND HEATING, LLC	Registered	4740 E. FATIC DRIVE WASILLA AK 99654	PLUMBER
A10001050004	HEATCO, LLC	Registered	17141 N. EAGLE RIVER LOOP ROAD EAGLE RIVER AK 99577	PLUMBER
0219-AK-72458	Homer Plumbing and Heating	Registered	581 Mountain View Drive Homer AK 99603	PLUMBER

SAMPLE FORMS AND CERTIFICATES  
 Division 0  
 Section 00630

ANCHORAGE SCHOOL DISTRICT'S  
 LIST OF

ALASKAN FEDERALLY REGISTERED APPRENTICESHIP PROGRAMS

Program Number	Program Name	Program Status	Address	Occupation Title
A1000158205	Hunter Mechanical International Corporation	Registered	1337 East 4th Avenue, Suite 1 Anchorage, AK 99501	PLUMBER
A10001070010	ICE SERVICES, INCORPORATED	Registered	2606 C STREET, SUITE 28 ANCHORAGE AK 99503	PLUMBER
A1000168010	Icy Strait Plumbing and Heating	Registered	8292a Garmel Street Juneau AK 99801	PLUMBER
A10001108402	Intelligent Design, LLC	Registered	11741 Timberlane Drive Anchorage AK 99515	PLUMBER
2018-AK-72980	IOLA Enterprises dba Runstrom Plumbing & Heating	Registered	HC 89 Box 8182 Tallroona AK 99676	PLUMBER
A10001081636	ISH Plumbing & Heating, Incorporated	Registered	P.O. Box 3385 Palmer AK 99645	PLUMBER
2018-AK-65772	John White's Plumbing & Heating, Incorporated	Registered	5327 Kenai Spur Highway Kenai AK 99611	PLUMBER
A10000592650	John's Heating Service, Inc.	Registered	1311 Mill Bay Road Kodiak AK 99615	PLUMBER
A1000060005	JUNNETMAN PLUMBING & HEATING, INC.	Registered	51315 SEA QUEST DRIVE KENAI AK 99611	PLUMBER
2017-AK-69607	KAJOU PLUMBERS JATC	Registered	1761 AKA STREET JUNEAU AK 99801	PLUMBER
A1000157698	Kiwi Mechanical	Registered	26547 S. Condo Loop Kodiak AK 99610	PLUMBER
A10001500012	KNIK PLUMBING & HEATING	Registered	Box 2132, Cordova AK 99574	PLUMBER
A10000600017	LARRY'S PLUMBING & HEATING	Registered	4915 W. 94TH AVENUE ANCHORAGE AK 99502	PLUMBER
A10001147687	Larry's Quality Heating & Plumbing, Inc.	Registered	P.O. BOX 4148 KODIAK AK 99610	PLUMBER
A1000098234	Lewis Mechanical, Inc.	Registered	2531 Barrett Avenue Juneau AK 99801	PLUMBER
A1000090011	M&J PLUMBING & HEATING, INC.	Registered	13240 View Heights Way Anchorage AK 99516	PLUMBER
A1000070010	MAT-SU MECHANICAL, INC.	Registered	34360 Business Park Frontage Road SOLDOTNA AK 99669	PLUMBER
2017-AK-68689	Monkey Wrench Mechanical	Registered	1265 EAST LOLLY CIRCLE WASILLA AK 99654	PLUMBER
A1000113341	Moore Heating & Air Conditioning	Registered	P.O. Box 73441 Fairbanks AK 99707	PLUMBER
A1000114890	Mr. Rooker Plumbing of Fairbanks	Registered	1801 East Dowling Road Anchorage AK 99507	PLUMBER
A10001091696	North Country Stoves, Incorporated	Registered	875 Old Richardson Highway FAIRBANKS AK 99701	PLUMBER
A1000146528	Pacific Iron Mechanical, LLC	Registered	2207 E. Tudor Road, #40 Anchorage AK 99507	PLUMBER
A1000107004	PARAGON PLUMBING & HEATING, INCORPORATED	Registered	P.O. Box 669 Haines AK 99827	PLUMBER
A1000000005	PARHUSHT MECHANICAL	Registered	3400 MACARTHUR STREET FAIRBANKS AK 99701	PLUMBER
A1000105006	PLEASANTS PLUMBING & HEATING	Registered	P.O. BOX 1806 Palmer AK 99645	PLUMBER
A10001060010	Polard Construction	Suspended	8301 SCHOON STREET ANCHORAGE AK 99518	PLUMBER
A10001167795	Porwinde Plumbing and Heating, Inc.	Registered	P.O. Box 32811 Juneau AK 99803	PLUMBER
A1000092200	Premier Mechanical, LLC	Registered	1500 Alaska Way Fairbanks AK 99709	PLUMBER
A10001108394	Red Hot Mechanical, Incorporated	Registered	2011 Millbay Road, #2 Kodiak AK 99615	PLUMBER
A10001167790	River City Plumbing & Heating	Registered	11723 OH Green Highway, Suite 107 Eagle River AK 99577	PLUMBER
A1000146795	Rock Solid Plumbing & Heating	Registered	865 6th Avenue Fairbanks AK 99701	PLUMBER
A10001177907	S.E. Plumbing, Incorporated	Registered	P.O. Box 6744 Jc Wasilla AK 99687	PLUMBER
2017-AK-652	Scott's Plumbing	Registered	86 Garland Court Ketchikan AK 99901	PLUMBER
A1000168008	Scott's Heating & Plumbing Services, Inc.	Registered	P.O. Box 3132 Kodiak AK 99615	PLUMBER
A1000098257	STATEWIDE MECHANICAL, LLC	Registered	22750 MCMANUS DRIVE CHUGIAK AK 99567	PLUMBER
A10001040017	Sundance Construction Company, Inc.	Registered	P.O. Box 561 Kaslo AK 99610	PLUMBER
A1000092651	Superior Mechanical, Inc.	Registered	P.O. Box 82409 Fairbanks AK 99708	PLUMBER
2018-AK-71943	Tauman Mechanical Plumbing & Heating, LLC	Registered	790 W. 88th Avenue Anchorage AK 99515	PLUMBER
A10001070021	VALLEY MECHANICAL CONTRACTING, INCORPORATED	Registered	8673 TEXAL DRIVE WASILLA AK 99654	PLUMBER
A1000115707	Waterworks Plumbing & Heating	Registered	P.O. Box 1974 Seldovia AK 99669	PLUMBER
2019-AK-67310	WOI PACK MECHANICAL, LLC	Registered	P.O. Box 521118 Big Lake AK 99662	PLUMBER
A1000030009	YUKON-KUSKOYUM DELTA APPRENTICESHIP PROGRAM	Registered	P.O. BOX 969 BETHEL AK 99559	RESIDENTIAL CARPENTER
A1000092654	Ketchikan Indian Community	Registered	915 Stehman Street Ketchikan AK 99901	RESIDENTIAL CARPENTER
A1000115357	Nichols Construction, LLC	Registered	P.O. Box 339 Wadai Cove AK 99401	RESIDENTIAL CARPENTER
A1000135994	Northwest Ironing, LLC	Registered	P.O. Box 228 Etninaak AK 99648	RESIDENTIAL WIREMAN
A1000093004	A & E ELECTRIC	Registered	1583 CROSSON AVENUE FAIRBANKS AK 99701	RESIDENTIAL WIREMAN
2009-07-0015	ALASKA JOINT ELECTRICAL APPRENTICESHIP & TRAINING TRUST	Registered	9609 B7 ANCHORAGE AK 99558	RESIDENTIAL WIREMAN
A100016527	Big W Electric, LLC	Registered	P.O. Box 80201 Fairbanks 99708	RESIDENTIAL WIREMAN
A1000108153	Design Heating Services	Registered	P.O. Box 1857 Fairbanks AK 99645	RESIDENTIAL WIREMAN
A1000135097	Engel Home Services	Registered	P.O. Box 975768 Wasilla AK 99697	RESIDENTIAL WIREMAN
A1000103511	Energy Communication and Events, LLC	Registered	2155 North Willingdon Court Wasilla AK 99654	RESIDENTIAL WIREMAN
A10001467793	Geather Electric Company, LLC	Registered	4193 Arden Avenue Juneau AK 99801	RESIDENTIAL WIREMAN
A1000040014	INTERIOR REGIONAL HOUSING AUTHORITY	Registered	820 27TH AVENUE FAIRBANKS AK 99701	RESIDENTIAL WIREMAN
A10001476192	Marly Wicks Electrical	Registered	1654 Sterling Highway Homer AK 99603	RESIDENTIAL WIREMAN
2017-AK-69629	New Home Apprenticeship Training	Registered	2471 West Trailner Drive Wasilla AK 99654	RESIDENTIAL WIREMAN
A10001060007	Pacific North Construction	Registered	P.O. Box 972965 Wasilla AK 99697	RESIDENTIAL WIREMAN
A10000900013	PITCHER ELECTRIC, INC.	Registered	P.O. BOX 87874 WASILLA AK 99689	RESIDENTIAL WIREMAN
A1000108400	RISING SON ELECTRIC SERVICES, LLC	Registered	80784 Eldorado Lake Road Chugiak AK 99567	RESIDENTIAL WIREMAN
A1000050001	Solid Ground Electric	Registered	13811 Svalga Drive Eagle River AK 99577	RESIDENTIAL WIREMAN
A1000090003	Alaska Concrete Training Trust	Registered	8761 King Street Anchorage AK 99515	SCAFFOLD ERECTOR
A1000050001	ABC of Alaska, Inc.	Registered	301 Arctic Spur Avenue, Suite 100 ANCHORAGE AK 99518	SHEET METAL WORKER
A1000050001	ALASKA SCSE SHEET METAL WORKERS JATC	Registered	1807 E. 75TH AVENUE, #4 ANCHORAGE AK 99518	SHEET METAL WORKER
A10001870004	DENALI MECHANICAL, INC.	Registered	995 RILEY COURT FAIRBANKS AK 99701	SHEET METAL WORKER
A10001540001	FAIRBANKS AREA SHEET METAL WORKERS JATC	Registered	1260 ALUMORA DRIVE FAIRBANKS AK 99709	SHEET METAL WORKER
A10001080587	Valley Mechanical Contractors, Inc.	Registered	6673 E. Tew-A Drive Wasilla AK 99654	SHEET METAL WORKER

ANCHORAGE SCHOOL DISTRICT'S  
 LIST OF

ALASKAN FEDERALLY REGISTERED APPRENTICESHIP PROGRAMS

Program Number	Program Name	Program Status	Address	Occupation Title
A1000950003	ABC of Alaska, Inc.	Registered	301 Arctic Slope Avenue, Suite 100 ANCHORAGE AK 99518	SPRINKLER FITTER (Existing Title: Pipe Fitter)
A10009490002	ANCHORAGE ALASKA AREA PIPE TRADES LOCAL #867 IATC	Registered	617 WEST POTTER DRIVE ANCHORAGE AK 99518	SPRINKLER FITTER (Existing Title: Pipe Fitter)
A10011510002	Fairbanks Area Plumbers & Pipefitters IATC	Registered	1578 BURGESS AVENUE FAIRBANKS AK 99709	SPRINKLER FITTER (Existing Title: Pipe Fitter)
A10000780016	ALASKA RIONWORKERS IATC	Registered	8441 SCHOON STREET ANCHORAGE AK 99518	STRUCTURAL STEEL WORKER (Alternative Title: Ironworker or Structural Ironworker)
A1000000007	ALASKA TEAMSTER-EMPLOYER SERVICE TRAINING TRUST	Registered	520 East 34th Avenue, Suite 201 ANCHORAGE AK 99503	SURVEYOR ASSISTANT INSTRUMENT
A10009400001	ALASKA JOINT ELECTRICAL APPRENTICESHIP & TRAINING TRUST	Registered	5800 E 5 STREET ANCHORAGE AK 99518	TREE TRIMMER (Line Clearance)
A10000000007	ALASKA TEAMSTER-EMPLOYER SERVICE TRAINING TRUST	Registered	520 East 34th Avenue, Suite 201 ANCHORAGE AK 99503	TRUCK DRIVER, HEAVY
2017-NH-688.0	River Valley Workforce Institute, Inc.	Registered	325 Mount Support Road Lebanon NH 03766	WELDER, COMBINATION
A10001910012	TECK ALASKA, INC.	Registered	3105 AKESHORE DR., BUILDING A, STE 101 ANCHORAGE AK 99503	WELDER, COMBINATION

Multiple-employer apprenticeship sponsors.

**ANCHORAGE SCHOOL DISTRICT  
APPRENTICE UTILIZATION FORM**

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

Solicitation Number: \_\_\_\_\_

Contractor: \_\_\_\_\_

**Prime Contractors**

1. Please list crafts/trades that will be used to complete this project and have Alaskan Federally Registered Apprenticeship programs.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

2. Please list the apprentices and corresponding apprenticeship programs that will be used by the prime contractor to complete this project. If more space is needed, please attach supplemental sheets.

<b>APPRENTICE'S NAME</b>	<b>APPRENTICESHIP PROGRAM</b>
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

3. Please list the subcontractors that will be used on the project.

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

4. Please list the apprentices and corresponding apprenticeship programs that will be used by the subcontractors to complete this project. If more space is needed, please attach supplemental sheets.

APPRENTICE'S NAME	APPRENTICESHIP PROGRAM
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

ANCHORAGE SCHOOL DISTRICT  
APPRENTICESHIP UTILIZATION PROGRAM CALCULATIONS FORM

CONTRACTOR NAME:		CHECK APPROPRIATE BOX		AUDIT PERIOD
CONTRACTOR ADDRESS:		Contractor <input type="checkbox"/> Check Box 3	Sub-contractor <input type="checkbox"/> Check Box 2	

LIST OF POTENTIAL ELIGIBLE TRADES CATEGORY	NUMBER OF AGGREGATE HOURS WORKED BY ALL WORKERS ON THE PROJECT IN TRADES-CRAFTS CATEGORY	NUMBER OF AGGREGATE APPRENTICE HOURS WORKED BY ALL WORKERS ON THE PROJECT IN TRADES-CRAFTS CATEGORY
CARPENTERS		
CEMENT MASONS		
ELECTRICIANS		
ELEVATOR WORKERS		
INSULATION WORKER		
LABORERS		
MILWRIGHTS		
OPERATING ENGINEERS		
PAINTERS		
PLUMBERS		
SHEET METAL WORKER		
SPRINKLER FITTER		
SURVEYORS		
TRUCK DRIVER		
TOTAL AGGREGATE HOURS		

ELIGIBLE TRADES CATEGORY	ALASKAN FEDERALLY REGISTERED APPRENTICESHIP PROGRAM	APPRENTICE'S NAME	DATE RANGE OF APPRENTICE GOOD STANDING STATUS START DATE	DATE RANGE OF APPRENTICE GOOD STANDING STATUS END DATE	NUMBER OF HOURS WORKED THIS AUDIT PERIOD BY APPRENTICE

**PENALTY TABLE**

**\$100,001 TO \$500,000**

1ST NON-COMPLIANCE (30-DAY)	\$500.00	
2ND CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$750.00	
3RD 30-DAY CONSECUTIVE NON-COMPLIANCE	\$1,000.00	
4TH CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$1,000.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING
FURTHER CONSECUTIVE NON-COMPLIANCE EXCEEDING 4TH NON-COMPLIANCE (30-DAY)	\$1,000.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING

**\$500,001 TO \$1,000,000**

1ST NON-COMPLIANCE (30-DAY)	\$750.00	
2ND CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$1,500.00	
3RD CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$2,500.00	
4TH CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$5,000.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING
FURTHER CONSECUTIVE NON-COMPLIANCE EXCEEDING 4TH NON-COMPLIANCE (30-DAY)	\$5,000.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING

**\$1,000,001 TO \$3,000,000**

1ST NON-COMPLIANCE (30-DAY)	\$1,000.00	
2ND CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$2,500.00	
3RD CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$5,000.00	
4TH CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$7,500.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING
FURTHER CONSECUTIVE NON-COMPLIANCE EXCEEDING 4TH NON-COMPLIANCE (30-DAY)	\$7,500.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING

**\$3,000,001 TO \$5,000,000**

1ST NON-COMPLIANCE (30-DAY)	\$1,500.00	
2ND CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$3,000.00	
3RD CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$7,500.00	
4TH CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$10,000.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING
FURTHER CONSECUTIVE NON-COMPLIANCE EXCEEDING 4TH NON-COMPLIANCE (30-DAY)	\$10,000.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING

**OVER \$5,000,000**

1ST NON-COMPLIANCE (30-DAY)	\$2,500.00	
2ND CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$5,000.00	
3RD CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$8,000.00	
4TH CONSECUTIVE NON-COMPLIANCE (30-DAY)	\$10,000.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING
FURTHER CONSECUTIVE NON-COMPLIANCE EXCEEDING 4TH NON-COMPLIANCE (30-DAY)	\$10,000.00	AND FINDING OF NON-RESPONSIBILITY IN FUTURE BIDDING

END OF SECTION

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

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GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

REFERENCE:

The General Conditions shall be GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION, ANCHORAGE SCHOOL DISTRICT, ANCHORAGE, ALASKA, bound herein.

SUPPLEMENTS:

Supplements may modify, change, delete, or add to these General Conditions. Where any article of the General Conditions is modified or any paragraph deleted, or any subparagraph or clause thereof is modified, or deleted by supplements, the unaltered provisions of such article, paragraph, subparagraph or clause shall remain in effect. The General Conditions and the Supplementary General Conditions are applicable to all of the Work under this Contract and shall apply to the Contractor and all Subcontractors, Sub-subcontractors, and Material Suppliers and Vendors.

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ARTICLE 1

CONTRACT DOCUMENTS

1.1 DEFINITIONS

1.1.1 The following terms as used in this Contract are defined as follows:

"Architect / Engineer or A/E": The design consultant of the Owner.

"Construction Manager": Supervises the construction phase of construction projects for the Anchorage School District Facilities Department.

"Contract": The Agreement between Owner and Contractor and the referenced Contract Documents stated therein.

"Contractor": The person, firm, or corporation contractually responsible to the Owner to provide the services called for by this Contract. Such entity may also be referred to as Managing General Contractor, General Contractor, or Prime Contractor.

"Days": Calendar days unless otherwise noted.

"Direct Cost": A direct cost is any cost that can be identified specifically with a particular final cost objective, i.e., with this contract, or an item of extra work, or change order under the contract.

"Senior Director of Capital Planning & Construction": Manages the Operations of the Anchorage School District Capital Planning & Construction Department.

"Furnish": Supply and deliver to the project including the cost to supply and deliver.

"Indirect Cost": An indirect cost, collectively called overhead, is any cost not directly identified with a single, final cost objective, but identified with two or more final cost objectives or an intermediate cost objective.

"Install": Build into the Work, ready to use in a complete, finished, and operable system, including the cost to install.

"Owner": The Anchorage School District, its Anchorage School Board of Education, the Superintendent of the Anchorage School District, and its employees.

"Project Manager": The person designated by the Senior Director of Capital Planning & Construction as the Owner's representative for this Contract, responsible for the day-to-day coordination between the Owner and the Contractor.

"Provide": Furnish and install for a complete, finished, and operable system.

"Reasonable Cost": A cost is reasonable if, in its nature or amount, it does not exceed that which would be incurred in a competitive market.

"Shop Drawings, Setting Drawings, Manufacturer's Printed Information and Submittal (collectively known as "Submittals")": The Contractor's information consisting of drawings, catalogs, illustrations, calculations, and other data delivered to the Owner for the purpose of assuring the Owner, prior to execution of that part of the Work, that the prescriptive element, component, subsystem, or service to be provided generally conforms with the

Contract. The Contractor is responsible to the Owner for the accuracy and completeness of the Submittals.

"Subcontractor": A person, firm, or entity who has a direct contract with the Contractor to perform any of the work.

"Work" or "Project": The finished product required by the Contract Documents together with the means and methods as determined, by the Contractor, to achieve the finished product.

#### 1.1.2 THE CONTRACT DOCUMENTS

The Contract Documents consist of the Owner-Contractor Agreement, the Drawings, the Project Manual, and all Addenda issued prior to and all Modifications issued after execution of the Contract. A Modification is (1) a directive for change in the work pursuant to Section 12.1.2 or (2) a change order pursuant to Section 12.2.6.

#### 1.1.3 THE CONTRACT

The Contract is the sum of all the Contract Documents. This Contract represents the entire and integrated agreement between the Owner and the Contractor and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification as defined in Subparagraph 1.1.2.

#### 1.1.4 THE WORK

The Work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce such construction, and all materials and equipment incorporated or to be incorporated in such construction.

#### 1.1.5 THE PROJECT

The Project is the total construction, of which the Work performed under the Contract documents may be the whole or a part.

#### 1.1.6 SCHOOL BOARD

Board of Education of the Anchorage School District, Anchorage, Alaska.

#### 1.1.7 BIDDER

Any individual, firm, partnership, corporation or combination thereof, formally submitting a bid for the work contemplated, or any portion thereof, acting directly or through an authorized representative.

#### 1.1.8 MUNICIPALITY

Municipality of Anchorage, Alaska.

#### 1.1.9 PROPOSAL

##### 1.1.9.1 BID PROPOSAL

The written proposal of the Bidder on the form furnished by the Owner for the Work contemplated, and which is required to be signed by the Bidder.

1.1.9.2 REQUEST FOR PROPOSAL (RFP)

The offer of the Contractor submitted on the prescribed form from the Project Manager to perform the work and furnish labor, material and all other costs at the prices quoted by the Contractor for proposed changes in the work.

1.1. 10 SPECIFICATIONS

The products, directions, requirements, explanations, terms and provisions pertaining to the various features of the Work to be done and the manner and method of performance. The specifications include such directions, requirements and explanations as appear on the drawings and as may otherwise be defined.

1.1. 11 PROJECT SITE

The geographic location of the Project as indicated on the Drawings.

1.1. 12 PROJECT MANUAL

The Project Manual includes the Bidding and Contract Requirements, Project Schedule Milestone Dates, General and Supplementary Conditions, Wage Rates, the Specifications and project drawings incorporated by reference.

1.1. 13 REQUEST FOR INFORMATION

Request for Information. Written interpretations necessary for the proper execution or progress of the Work, in the form of drawings or otherwise, will be issued with reasonable promptness by the Project Manager. The Contractor may make written request to the Project Manager for such interpretations. Such interpretations will be consistent with and reasonably inferable from the Contract Documents.

1.2 EXECUTION, CORRELATION AND INTENT

1.2.1 The Contract shall be signed in doubles by the Owner and Contractor, each of which shall be deemed an original, but all or which shall constitute one and the same instrument.

1.2.2 By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the Work is to be performed, and correlated his observations with the requirements of the Contract Documents.

1.2.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work. Except as otherwise specifically provided, the Contractor shall furnish all labor, tools, implements, machinery, supplies, materials, and incidentals, and shall do all things necessary to perform and to complete the Work. The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. Work not covered in the Contract Documents will not be required unless it is consistent therewith and is reasonable inferable therefrom as being necessary to produce the intended results. Words and abbreviations which have well-known technical or trade meanings are used in the Contract Documents in accordance with such recognized meanings unless otherwise specifically defined herein.

1.2.4 The organization of the Specifications into division, sections and articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by a trade.

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1.2.5 If any portion of the Contract Documents shall be in conflict with any other portion, the various documents comprising the Contract Documents shall govern in the following order of precedence:

- 1.2.5.1 The Owner-Contractor Agreement;
- 1.2.5.2 Modifications;
- 1.2.5.3 Addenda;
- 1.2.5.4 Section 00800 - Supplementary General Conditions;
- 1.2.5.5 Section 00700 - General Conditions of the Contract for Construction;
- 1.2.5.6 Specifications - embodying all other sections in the Project Manual;
- 1.2.5.7 Drawings: as between schedules and information given on Drawings, the schedules shall govern; as between written dimensions given on Drawings and scaled measurements, the written dimensions shall govern; as between large-scale Drawings and small-scale Drawings, the larger scale shall govern;
- 1.2.5.8 Performance Bond, Labor and Material Payment Bond;
- 1.2.5.9 Bid/Proposal Form;
- 1.2.5.10 Instructions to Bidders/Proposers;
- 1.2.5.11 Invitation to Bid/Request for Proposal;

All such conflicts shall be reported, in writing, to the Project Manager. Schedules, lists, indexes, tables, inventories, written instruction, written descriptions, summaries, statements, classifications, specifications, written selections, or written designations, although appearing on the Drawings, are deemed to be and are "Specifications" as defined by this Subparagraph 1.2.5. The principles as set forth herein shall not alter the provisions of Subparagraph 1.2.3.

In the event there is a conflict between or among any provisions within one of the component parts of the Contract Documents, the higher standard or more stringent requirement shall govern.

1.2.6 The Contractor agrees that nothing contained in the Contract Documents or any contract between the Owner and the Architect shall create any contractual relationship between the Architect and the Contractor, any Subcontractors, Sub-subcontractors, Material Suppliers or Vendors. The Contractor acknowledges and agrees that this Contract is not intended to create, nor shall any provision be interpreted as creating, any contractual relationship between the Owner or Contractor or any third parties.

1.2.7 Any material or operation specified by reference to published specifications of a manufacturer, a society, an association, a code, or other published standard, shall comply with requirements of the listed document and project specifications; or as between referenced documents, the more stringent code or performance requirements shall govern. The Contractor, if requested, shall furnish an affidavit from the manufacturer certifying that the materials or products delivered to the Project meet the requirement specified.

1.3 OWNERSHIP AND USE OF DOCUMENTS

1.3.1 All Drawings, Specifications and copies thereof furnished by the Owner are and shall remain its property. They are to be used only with respect to this Project and are not to be used on any other project.

1.3.2 The Owner will provide conformed drawings and specifications incorporating Addenda items into the Contract Documents. A reasonable number of reproduced sets will be provided to the contractor without charge.

END OF ARTICLE 1

ARTICLE 2

ARCHITECT

2.1 DEFINITION

- 2.1.1 The Architect is the person or organization lawfully licensed to practice architecture, or an entity lawfully practicing architecture identified as such in the Owner-Contractor Agreement, and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Architect means the Architect and his engineers, whether under contract or within his own organization, or his authorized representative.
- 2.1.2 The term Architect is interchangeable with the term Project Architect, and is exclusive of the services of the Asbestos Abatement Architect.
- 2.1.3 The Asbestos Abatement Architect is not a part of the Architect's organization.

2.2 SERVICES OF THE ARCHITECT

- 2.2.1 The Architect will provide certain services as hereinafter described.
- 2.2.2 Should errors, omissions, or conflicts in the Drawings, Specifications, or other Contract Documents provided by the Architect be discovered, the Architect will prepare such amendments or supplementary documents and provide consultation as may be required.
- 2.2.3 The Architect and his consulting engineers (including but not limited to the structural, mechanical, and electrical disciplines) will visit the site at intervals appropriate to the stage of construction to familiarize themselves generally with the progress and quality of the Work and to determine in general if the Work is proceeding in accordance with the Contract Documents. Unless otherwise provided in the Owner-Architect Agreement, the Architect and his consulting engineers will not be required to make exhaustive or continuous on-site inspection or observations to check the quality or quantity of the Work, but they shall make as many on-site inspections and observations as may reasonably be required to fulfill their obligations to the Owner. On the basis of such on-site observation, the Architect and his consulting engineers shall endeavor to guard the Owner against defects and deficiencies in the Work of the Contractor.
- 2.2.4 The Architect will render written field reports to the Project Manager in the form required by the Project Manager relating to the periodic visits and inspections of the Project required by Subparagraph 2.2.3.
- 2.2.5 The Architect will not be responsible for and will not have control or charge of construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, and he will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Architect will not be responsible for or have control or charge over the acts or omissions of the Contractor, Subcontractors, or any of their agents or employees, or any other persons performing any of the work.
- 2.2.6 The Architect shall at all times have access to the Work wherever it is in preparation or progress. The Contractor shall provide safe facilities for such access so the Architect may perform his functions under the Contract Documents.
- 2.2.7 The Project Manager will consult with the Architect regarding the Contractor's Applications for Payment and both shall sign the Applications for Payment as provided in Subparagraph

9.4.

- 2.2.8 As required, the Architect will render to the Project Manager interpretations necessary for the proper execution or progress of the Work, with reasonable promptness and in accordance with any time limit agreed upon.
- 2.2.9 All communications, correspondence, submittals, and documents exchanged between the Architect and the Contractor in connection with the Project shall be through or in the manner prescribed by the Project Manager.
- 2.2.10 All interpretations and decisions of the Architect will be consistent with the intent of and reasonably inferable from the Contract Documents.
- 2.2.11 The Architect's decision in matters relating to artistic effect will be final if consistent with the intent of the Contract Documents and approved by the Project Manager.
- 2.2.12 If the Architect observes any Work that does not conform to the Contract Documents, the Architect shall promptly report in writing this observation to the Project Manager. The Architect will prepare and submit to the Project Manager punchlists of the Contractor's Work which is not in conformance with the Contract Documents. The Project Manager will transmit such punchlists to the Contractor.
- 2.2.13 The Architect will review and take appropriate action upon Contractor's submittals such as Shop Drawings, Product Data and Samples, but only for conformance with the design concept of the Work and for general compliance with the Contract Documents. Such action shall be taken in no more than twenty-one (21) days of receipt unless otherwise authorized by the Project Manager.
- 2.2.14 The Project Manager will establish with the Architect procedures to be followed for review and processing of all Shop Drawings, catalog submittals, project reports, test reports, maintenance manuals, and other necessary documentation, as well as requests for changes and applications for extensions of time.
- 2.2.15 The Architect will prepare technical documentation for Change Orders when directed by the Project Manager.
- 2.2.16 The Architect and the Project Manager will conduct inspections to determine the dates of Substantial Completion and Final Completion, and will issue a final Certificate of Substantial Completion.
- 2.2.17 Unless otherwise provided in the Contract Documents, or the Owner-Architect Agreement, the Architect will prepare a set of reproducible record prints of Drawings showing significant changes in the Work made during the construction process, based on neatly and clearly marked-up prints, Drawings, and other data furnished by the Contractor.
- 2.2.18 In case of the termination of the employment of the Architect, the Owner may appoint an architect against whom the Contractor makes no reasonable objection whose status under the Contract Documents shall be that of the former architect, or the Owner may have the Project Manager assume all of the services of the Architect thereafter.

2.3 ASBESTOS ABATEMENT ARCHITECT

- 2.3.1 Solely with regards to asbestos abatement, the Asbestos Abatement Architect shall be afforded the same rights and authority as hereinbefore allowed the Architect.

2.3.2 The Architect is not a part of the Asbestos Abatement Architect's organization.

2.4 SEPARATE ARCHITECT, ENGINEER OR ARCHITECT/ENGINEER

2.4.1 Unless otherwise noted in the Contract Documents, the Separate Architect, Engineer or Architect/Engineer, as defined by the Supplementary General Conditions, Document 00800, shall be afforded the same rights and authority as hereinbefore allowed the Architect.

2.4.2 The Contract Documents, when applicable, shall define the portion of the Work relating to the services of the Separate Architect, Engineer or Architect/Engineer.

END OF ARTICLE 2

ARTICLE 3

OWNER

3.1 DEFINITIONS

- 3.1.1 The Owner is the Anchorage School District acting through its legally constituted officials, officers, employees, or agents and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Owner means the Owner or its authorized representative or agent.
- 3.1.2 The Asbestos Abatement Consultant is under separate Agreement with the Owner. Communications protocol between the Contractor and the Asbestos Abatement Architect shall be as established by the Project Manager.

3.2 PROJECT MANAGER

- 3.2.1 The Project Manager will be the Owner's representative and agent to the Contractor with respect to the Project during construction and until the issuance of the final Certificate for Payment. The term Project Manager is referred to throughout the Contract Documents as if singular in number and masculine in gender. The Owner's communications with the Contractor and the Architect will be through the Project Manager, who will have full authority to act on behalf of the Owner with regard to all aspects of the Project except that the Owner must approve all Change Orders and payments to the Contractor. The Project Manager's actions with regard to this project will be as an agent and representative of the Owner.
- 3.2.2 The Project Manager is not authorized to revoke, alter, change, relax, or release any requirements of the Contract, nor to approve or accept any portion of the Work not executed in accordance with, nor to issue instructions contrary to, the Contract Documents.
- 3.2.3 Nothing contained within the Contract Documents shall create any contractual relationship between the Project Manager and the Contractor.

3.3 INFORMATION, SERVICES AND RIGHTS OF THE OWNER

- 3.3.1 The Owner, through the Project Manager, will provide administration of the Contract as hereinafter described.
- 3.3.2 The Owner and the Project Manager shall at all times have access to the Work whenever it is in preparation or progress. The Contractor shall provide safe facilities for such access.
- 3.3.3 The Owner and the Project Manager shall not be responsible for or have control or charge of the construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connection with the Work and will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Project Manager will not be responsible for the acts or omissions of the Contractor, any Subcontractors, or any of their agents or employees, or any other persons performing any of the Work.
- 3.3.4 The Project Manager shall have authority on behalf of the Owner to condemn or reject Work when, in the Project Manager's opinion the Work does not conform to the Contract Documents. Whenever, in the Project Manager's reasonable opinion, it is considered necessary or advisable to insure the proper implementation of the intent of the Contract Documents, the Project Manager shall have the authority to require special inspection or

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testing of any Work in accordance with the provisions of the Contracts Documents, whether or not such Work be then fabricated, installed, or completed.

- 3.3.5 The Project Manager will have authority to require additional inspection or testing of the Work in accordance with Subparagraph 7.7.3, whether or not such Work be then fabricated, installed, or completed. However, neither the Project Manager's authority to act under Subparagraphs 3.3.4 and 3.3.5, nor any decision made by the Project Manager in good faith either to exercise or not to exercise such authority shall give rise to any duty or responsibility of the Project Manager to the Contractor, any Subcontractor, any of their agents or employees, or any other persons performing any of the work.
- 3.3.6 The Project Manager shall have the authority and discretion to call, schedule, and conduct job meetings to be attended by the Contractor, and representatives of his Subcontractors, and Material Suppliers, and Vendors and the Architect, to discuss such matters as procedures, progress, changes, problems, claims and scheduling.
- 3.3.7 The Project Manager will establish procedures to be followed for processing all Shop Drawings, catalogs, and other project reports, and other documentation, test reports, and maintenance manuals.
- 3.3.8 The Project Manager will review all requests for changes and shall implement the processing of Change Orders, including applications for extension of the Contract time.
- 3.3.9 Project scheduling shall occur as set forth in Division 1, Section 01311 of the General Requirements, entitled "Schedules and Reports". The Owner and the Project Manager will not be responsible for the failure of the Contractor to plan, schedule, and execute the Work in accordance with the Contractor's accepted schedule or the failure of the Contractor to meet the Project Schedule Milestone Dates as set forth under Section 00200 hereof or the failure of the Contractor to schedule and coordinate the Work of his own trades and Subcontractors, and Material Suppliers and Vendors, or the failure of the Contractor to coordinate and cooperate with other separate contractors.
- 3.3.10 The Project Manager, in consultation with the Architect, will review and process all Applications for Payment by the Contractor, including the final Application for Payment.
- 3.3.11 The Owner and the Project Manager will not be responsible for the acts or omissions of the Contractor, or any Subcontractor, or Material Supplier and Vendor, or any contractor's, subcontractor's or Material Supplier's and Vendor's agents or employees, or any other persons performing any of the Work.
- 3.3.12 The Owner shall, if requested by the Contractor, furnish all existing and available surveys describing the physical characteristics, legal limitations and utility locations for the site of the Project.
- 3.3.13 Except as otherwise provided in the Contract Documents, the Owner shall pay for necessary easements required for permanent structures or for permanent changes in existing facilities. The Contractor shall be responsible for obtaining all necessary permits and coordinating the securing of easements, inspections and approvals for permanent structures and all associated work.
- 3.3.14 Information or services under the Owner's control shall be furnished by the Owner with reasonable promptness to avoid delay in the orderly progress of the Work.
- 3.3.15 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, all copies of Drawings and Specifications, and such supplemental

documents as are reasonably necessary for the execution of the Work.

- 3.3.16 The foregoing rights are in addition to other rights of the Owner enumerated herein and those provided by law.

### 3.4 OWNER'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS

- 3.4.1 The Owner reserves the right to perform other work at the project site(s) with his own forces, and to award separate contracts in connection with portions of other work on the site.
- 3.4.2 The Contractor shall afford the Owner and separate Contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their Work, and shall coordinate his Work with theirs as required by the Contract Documents.
- 3.4.3 A pre-construction conference will be held with the Contractor, Project Manager, and other contractors performing work at the project site, for the purpose of coordinating work in areas where more than one contractor may be working. The time of the meeting will be established by the Owner's Representative prior to the Contractor commencing his work.
- 3.4.4 The Contractor shall attend additional coordination meetings, as requested by the Owner's Representative.

### 3.5 OWNER'S RIGHT TO STOP OR TO SUSPEND THE WORK

- 3.5.1 If the Contractor fails to correct defective Work as required by Paragraph 13.2 or fails to carry out the Work or supply labor and materials in accordance with the Contract Documents, the Owner, through the Project Manager, by a written order 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 Project Manager to stop the Work on behalf of the Owner shall not give rise to any duty on the part of the Project Manager to exercise this right for the benefit of the Contractor or any other person or entity.
- 3.5.2 The Project Manager may order the Contractor in writing to suspend, delay, or interrupt all or any part of the Work for such period of time as he may determine to be appropriate for the convenience of the Owner.
- 3.5.3 Upon receipt of any such suspension order, the Contractor shall immediately comply with its terms and take all reasonable steps to minimize incurring costs allocated to the Work covered by the order during the period of Work suspension.
- 3.5.4 If the performance of all or any part of the Work is suspended, or delayed, or interrupted by the Owner or the Project Manager pursuant to Subparagraph 3.5.2, the Contractor may make application for an adjustment in contract time and contract sum pursuant to Paragraph 12.2, and Division 1, Section 01311, Paragraph 2.03, respectively. No such adjustment shall be made if the performance of the Work is suspended by the Owner pursuant to Subparagraph 3.5.1.

### 3.6 OWNER'S RIGHT TO CARRY OUT THE WORK

- 3.6.1 If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within seven (7) days after receipt of written notice from the Project Manager to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, after seven (7) days following receipt by the Contractor of an additional written notice and without prejudice to any other remedy he may have,

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make good such deficiencies and may further elect to complete all Work thereafter through such means as the Owner may select, including the use of a new Contractor. In such a case an appropriate Change Order shall be issued deducting from the payments then or thereafter due the Contractor the cost of correcting such deficiencies, including additional Owner administrative and legal costs, and compensation for the Architect's and the Project Manager's additional services made necessary by such default, neglect or failure. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

3.7 AUDIT

- 3.7.1 The Owner shall have access to the Contractor's books, accounts, records, invoices and other records and documents pertaining to the Project at all reasonable times for the purpose of inspecting and auditing such. The Contractor shall provide to the Owner his daily manpower and equipment reports for all Subcontractors and any and all information requested or required by the Owner to validate or verify an Application for Payment, claim for cost or a requisition. The Contractor shall have no right to additional compensation or time in the event a requisition is delayed due to the inability of the Owner to validate or verify an Application for Payment due to the failure or refusal of the Contractor to allow such inspection or audit or to provide such requested information.
- 3.7.2 The Contractor shall maintain all data and records pertinent to the Work performed under this Contract in accordance with generally accepted accounting principles, and shall preserve and make available all data and records until the expiration of three (3) years from the date of final payment under this Contract, or for such longer period, if any, as is required by applicable statute, pending litigation, or by other articles of this Contract. The Owner and its authorized representatives shall have access to all such data and records for such time period to inspect, audit and make copies thereof during normal business hours.
- 3.7.3 The Contractor covenants and agrees that it shall require that any Subcontractor and any Sub-Subcontractor utilized in the performance of this Contract shall permit the authorized representatives of the Owner to similarly inspect and audit all data and records of said Subcontractors and Sub-Subcontractors relating to the performance of said Subcontractors and Sub-Subcontractors under this Contract for the same time period specified above.

END OF ARTICLE 3

ARTICLE 4

CONTRACTOR

4.1 DEFINITION

4.1.1 The Contractor is the person or organization identified as such in the Owner-Contractor Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Contractor means the Contractor or his authorized representative, who shall have the authority to bind the Contractor in all matters pertinent to this Contract.

4.2 REVIEW OF CONTRACT DOCUMENTS

4.2.1 Before placing his proposal to the Owner, and continuously after execution of the Contract, the Contractor shall carefully study and compare the Contract Documents and shall at once report to the Owner, through the Project Manager, any error, inconsistency or omission he may discover, including any requirement which may be contrary to any law, ordinance, rule, regulation or order of any public authority bearing on the performance of the Work. By submitting his proposal or bid for the Contract and the Work under it, the Contractor agrees that the Contract Documents appear accurate, consistent, and complete insofar as can reasonably be determined. If the Contractor has reported in writing an error, inconsistency or omission, has promptly stopped the affected work until otherwise instructed, and has otherwise followed the instructions of the Owner, the Contractor shall not be liable to the Owner for any damage resulting from any such errors, inconsistencies or omissions in the Contract Documents. The Contractor shall perform no portion of the Work at any time without Contract Documents and, where required, approved Shop Drawings, Product Data or Samples for such portion of the Work.

4.3 SUPERVISION AND CONSTRUCTION PROCEDURES

4.3.1 The Contractor shall supervise and direct the Work, using his best skill and attention. He shall be solely responsible for and have control over all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract.

4.3.2 The Contractor shall be responsible to the Owner for the acts and omissions of his employees, Subcontractors, and Material Suppliers and Vendors, and their agents and employees, and other persons performing any of the work.

4.3.3 The Contractor shall not be relieved from his obligations to perform the Work in accordance with the Contract Documents either by the activities or duties of the Architect or the Project Manager in their administration of the Contract, or by inspections, tests or approvals (or the lack thereof) required or performed under Paragraph 7.7 by persons other than the Contractor.

4.3.4 Independent of this Contract, the Owner has undertaken a long term asbestos abatement program by which the Owner intends to properly document the existence of asbestos-contained materials and the lawful removal of ACM by qualified asbestos abatement contractors or subcontractors in accordance with the Asbestos Hazard Emergency Response Act (AHERA) and the Asbestos School Hazard Abatement Reauthorization Act (ASHARA). As part of this asbestos abatement program, the Owner has employed a private consultant to locate asbestos-containing materials present in the Owner's facilities. A copy of the AHERA report as it relates to the facility which is involved in this Contract can be obtained from the Owner by contacting the Project Manager.

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- 4.3.4.1 Before starting the Work or any Section of the Work, the Contractor shall inspect or, if using a Subcontractor for a Section of the Work, shall cause his Subcontractor to inspect all preparatory work, including that performed prior to the commencement of the Work under this Contract, for the presence of suspected asbestos-containing materials.
- 4.3.4.2 If the Contractor or his Subcontractor encounters any asbestos-containing material or suspected asbestos-containing material -- whether such material is identified in the AHERA report or the private consultant's report or not -- the Contractor shall bring it to the immediate attention of the Project Manager by timely written notice. Such notification shall be considered timely if received by the Project Manager within two (2) days after the discovery of the asbestos-containing material or suspected asbestos-containing material by the Contractor or by a Subcontractor if the Contractor uses a Subcontractor to perform that Section of the Work. If the Contractor does not give timely notice of the presence of asbestos-containing material or suspected asbestos-containing material, the Contractor will not receive additional compensation for delay caused by the necessity of the Owner to stop work and abate asbestos-containing material during the course of the Work. Failure of a Subcontractor to report the presence of asbestos-containing material or suspected asbestos-containing material to the Contractor shall not relieve the Contractor of his responsibilities hereunder.
- 4.3.4.3 If the Contractor, or his employees, agents or subcontractors intentionally or negligently disturbs or removes, or causes to be disturbed or removed, all or a portion of asbestos-containing material, the Contractor shall indemnify, hold harmless and defend the School District and the Project Manager from and against any claims, damages, losses and expenses, and alleged claims, damages, losses and expenses, including but not limited to attorney's fees, arising out of or resulting from any cleanup/decontamination work, medical treatment, or legal action arising or resulting from said intentional or negligent disturbance or removal of asbestos-containing material.
- 4.3.5 The Contractor shall make all necessary arrangements and so conduct the Work that all parts of the same will be carried out simultaneously and harmoniously and that the work of installing the various sections or items of same shall not interfere with or retard the progress of other Work.
- 4.3.6 If it becomes necessary at any time during the progress of the Work to move materials and/or equipment which have been temporarily located or stored, the Contractor shall move them or cause them to be moved, at his expense. Care shall be taken that no part of the Work shall be overloaded at any time.
- 4.3.7 The Contractor shall furnish all required information to ensure continuity between various sections of the Work and to avoid delay and obviate defects on any part of the whole Work, all as approved by the Owner.
- 4.3.8 Any damage caused by the handling or installation of materials or equipment, or the carrying out of any portion of the Work must also be made good by the Contractor to the satisfaction of the Project Manager.
- 4.3.9 The Contractor shall compare all the various drawings, and shall install Work in a manner to provide for all clearances and finishes indicated thereon. Work under each trade shall be arranged to clear piping, equipment, etc., of all other trades.
- 4.3.10 The Contractor shall inform himself fully regarding any peculiarities and limitations of the

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space available for the installation of the material. He shall see that all equipment, such as valves, or other appliances necessary to be reached from time to time for operations and maintenance are made readily accessible.

- 4.3.11 The construction of the Work may develop conditions that render impracticable the location of equipment as shown or noted. In such cases, before installing his Work, the Contractor shall call the condition to the attention of the Project Manager for resolution.
- 4.3.12 It shall be the Contractor's sole responsibility to so coordinate the Work that chases or other recesses in walls shall be provided where required, and that reasonable clearance between the work of various trades shall be maintained. The layout for openings and chases through walls, floors, and partitions, etc., shall be arranged in advance of the actual construction and the work carried out without unnecessary and superfluous cutting, etc., after the Work has been completed.
- 4.3.13 Dimensions shall be verified by the measurements of the buildings and the property, and the Contractor shall be responsible for all of his work fitting in place in a satisfactory and workmanlike manner.
- 4.3.14 The Contractor has carefully examined, in detail, all of the Drawings and Specifications and the time established for completion of the Work, and he accepts them as adequate to meet the requirements specified.
- 4.3.15 The Contractor shall be responsible for coordinating the work performed by any artist in connection with the project's ornamentation with the construction of this project, so that there shall be no unnecessary delay or interference in connection with said construction.
- 4.3.16 The Contractor shall coordinate and generally supervise the Work of this Contract and shall coordinate his Work with Work performed under Separate Contracts by mutual arrangement and agreement with the Contractors for those Contracts and the Project Manager. Unresolved disputes will be finally resolved by the Project Manager, subject to approval of the Owner, and the dispute resolution provisions of Subparagraph 12.5.

4.4 LABOR AND MATERIALS

- 4.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the execution and completion of the Work in accordance with the Contract Documents, and any applicable building permit, conditional and final certificate(s) of occupancy, code or statute, whether specifically required by the Contract Documents or whether their provision may reasonably be inferred as necessary to produce the intended results, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- 4.4.2 The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the Work any unfit person or anyone not skilled in the task assigned to him. The Project Manager may, by notice in writing, require the Contractor to promptly remove from the site of the Work any employee or worker the Project Manager deems incompetent, careless or otherwise objectionable including violation of District Policies relating to alcohol, illegal drugs, or firearms on District property.
- 4.4.3 The Contractor shall be responsible for ensuring that the Work is completed in a skillful and workmanlike manner.

4.5 WARRANTY

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- 4.5.1 The Contractor warrants to the Owner and the Architect that all materials and equipment furnished under this Contract will be new unless otherwise specified, and that all Work will be of good quality, free from faults and defects and in conformance with the Contract Documents. All Work not conforming to these requirements, including substitutions not properly approved and authorized, is defective. If required by the Project Manager or the Architect, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment. This warranty is not limited by the provisions of Paragraph 13.2.
- 4.5.2 The warranties set forth in this Paragraph 4.5 and elsewhere in the Contract Documents shall survive final acceptance under Paragraph 9.9.
- 4.6 TAXES
- 4.6.1 The Contractor shall pay all sales, consumer, use and other similar taxes for the Work or portions thereof provided by the Contractor which are legally enacted at the time bids are received, whether or not yet effective.
- 4.7 PERMITS, FEES AND NOTICES
- 4.7.1 Except as specifically provided in Subparagraph 3.3.13 the Contractor shall secure and pay for (1) all permits and governmental fees, licenses and inspections necessary for the proper execution of the Work which are legally required at the time the bids are received, and (2) all permits and governmental fees, licenses and inspections from any agency or department of the Municipality of Anchorage that would be necessary for the proper execution of the Work or legally required at the time bids are received just as if the Work were performed and the Project located within the Municipality of Anchorage. The Municipality of Anchorage shall be considered a "public authority bearing on the performance of the Work" and a "public authority having jurisdiction" for purposes of this Contract.
- 4.7.1.1 The Anchorage School District has paid for the Municipality of Anchorage's Building Plan Review and Building Fee Permit. Contractor shall obtain permit upon notice from Project Manager.
- 4.7.2 The Contractor shall give all notices and comply with all such laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the performance of the Work.
- 4.7.3 If the Contractor performs any Work knowing it to be contrary to any such laws, ordinances, rules, regulations or orders of any public authority bearing on the performance of the Work, and does so without reasonable notice to the Project Manager, the Contractor shall assume full responsibility therefore and shall bear all costs attributable thereto.
- 4.7.4 Notification, coordination and completion of the installation of all required utilities, whether temporary or permanent, is the sole responsibility of the Contractor. The Owner shall not be responsible for any damage or delay caused by any party's inability to perform installations in the time frame desired by the Contractor.
- 4.8 ALLOWANCES
- 4.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by these allowances shall be supplied for such amounts and by such persons as the Owner may direct, but the Contractor will not be required to employ persons against whom he makes a reasonable objection.

4.8.2 Unless otherwise provided in the Contract Documents:

- 4.8.2.1 These allowances shall cover the cost to the Contractor, less any applicable trade discount, of the materials and equipment required by the allowance delivered at the site, and all applicable taxes;
- 4.8.2.2 The Contractor's costs for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the original allowance shall be included in the Contract Sum and not in the allowances;
- 4.8.2.3 Whenever the cost is more than or less than the allowance, the Contract Sum shall be adjusted accordingly by Change Order, the amount of which will recognize changes, if any, in handling costs on the site, labor, installation costs, overhead, profit and other expenses.

4.9 SUPERINTENDENT

- 4.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance full-time at the Project Site during the progress of the Work. The superintendent shall represent the Contractor, and all communications given to the superintendent shall be as binding as if given to the Contractor. If requested by the Project Manager, the Contractor shall provide a management chart and a list of personnel in a number stipulated by the Project Manager which shall comprise the superintending staff. In such event, all references to the superintendent elsewhere in the Contract Documents shall mean the superintending staff.
- 4.9.2 The superintendent shall be in attendance at the Project Site not less than eight (8) hours per day, five (5) days per week, unless the job is closed down due to a general strike or conditions beyond the control of the Contractor or until termination of the Contract in accordance with the Contract Documents. The superintendent shall not be employed on any other project during the course of the Work.
- 4.9.3 In the event any of the following conditions shall exist, the Contractor shall require that his superintendent be at the Project Site not less than ten (10) hours per day, six (6) days per week:
  - 4.9.3.1 Should Substantial Completion not be accomplished on schedule.
  - 4.9.3.2 Should Final Completion not be accomplished on schedule.
  - 4.9.3.3 Should the Contractor's progress schedule indicate the Contractor to be fourteen (14) or more days behind schedule at any time during construction up until thirty (30) days prior to scheduled Substantial Completion.
  - 4.9.3.4 Should the Contractor's progress schedule indicate the Contractor to be seven (7) or more days behind schedule at any time during the last thirty (30) days prior to scheduled Substantial Completion.

4.10 CONSTRUCTION SCHEDULE

- 4.10.1 The Contractor shall prepare and submit to the Project Manager for the Owner's review and acceptance a construction schedule pursuant to and in accordance with Division 1, Section 01311 of the General Requirements entitled "Project Schedule."

## 4.11 DOCUMENTS AND SAMPLES AT THE SITE

4.11.1 The Contractor shall maintain at the site for the Owner one record copy of all Drawings, Specifications, Addenda, Change Orders and other Modifications, in good order and marked currently to record all changes made during construction, and approved Shop Drawings, Product Data and Samples. These shall be available to the Project Manager and the Architect and shall be delivered to the Project Manager upon substantial completion of the Work.

## 4.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

4.12.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or any Subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.

4.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, diagrams, and other information furnished by the Contractor to illustrate a material, product or system for some portion of the Work.

4.12.3 Samples are physical examples which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.

4.12.4 The Contractor shall review, approve and submit using the ASD Procore Construction Management Program, with reasonable promptness and in such sequence as to cause no delay in the Work or in the work of the Owner or any separate contractor, all Shop Drawings, Product Data and Samples required by the Contract Documents, or subsequently by the Project Manager. The Contractor's Shop Drawings, Product Data, and Samples submissions shall be coordinated and consistent with the Contractor's Project Scheduling obligations under Division 1, Section 01311 of the Contract Documents. Shop Drawings and Samples shall be properly identified as specified, or as the Project Manager may require. At the time of submission, the Contractor shall inform the Architect in writing of any deviation in the Shop Drawings or Samples from the requirements of the Contract Documents.

4.12.5 By approving and submitting Shop Drawings, Product Data and Samples, the Contractor represents that he has determined and verified all materials, field measurements, and field construction criteria related thereto, and that he has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents. The Contractor shall adhere to any supplementary processing and scheduling instruction pertaining to Shop Drawings which may be issued by the Project Manager.

4.12.6 The Contractor shall not be relieved of responsibility for any deviation from the requirements of the Contract Documents by the Architect's approval and Project Manager's review of Shop Drawings, Product Data or Samples under Subparagraph 2.2.14 unless the Contractor has specifically informed the Architect and Project Manager in writing of such deviation at the time of submission and the Architect and Project Manager have given written approval to the specific deviation. The Contractor shall not be relieved from responsibility for errors or omission in the Shop Drawings, Product Data or Samples by the Architect's approval of or Project Manager's review thereof.

4.12.7 The Contractor shall promptly make corrections required by the Architect and shall resubmit the required number of corrected copies of Shop Drawings or new Product Data or Samples. The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data or Samples, to revisions other than those requested by the

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Architect on previous submittals. Resubmittals necessitated by required corrections due to Contractor's errors or omissions, or less than complete submittals as required by the specifications, shall not be cause for extension of Contract Time.

- 4.12.8 The Contractor shall keep on the job at all times copies of approved Shop Drawings, Product Data or Samples which bear the review stamp of the Architect/Engineer.
- 4.12.9 The review of Shop Drawings, Product Data or Samples by the Architect and Project Manager shall not relieve the Contractor from his responsibility to coordinate the work of the Subcontractors.
- 4.12.10 The review of Shop Drawings, Product Data or Samples by the Architect and the Project Manager shall not relieve the Contractor of his responsibilities to construct the work in accordance with the Contract Documents.
- 4.12.11 The review of Shop Drawings, Product Data or Samples by the Architect shall not be construed as an approval of the quantities of materials or confirmation of dimensions.
- 4.12.12 In preparing a schedule for delivery of materials the Contractor shall allow reasonable time for the approval, including resubmissions due to Contractor's errors and omissions, of Shop Drawings, Product Data or Samples.
- 4.12.13 When Shop Drawings, Cuts, or Brochures are forwarded to the Architect by the Contractor for approval, a copy of the Contractor's letter of transmittal with project name, Contractor's name, number of drawings, title and other pertinent data covering each transaction is to be mailed to the Project Manager. The Architect and his consulting Engineers shall follow the same procedure when it is necessary for them to return or transfer Shop Drawings, Cuts or Brochures either between themselves or to the Contractor for changes, corrections or resubmittal, so that the Project Manager can record and follow procedure for each transaction to finality.
- 4.12.13.1 Pursuant to and consistent with the Contractor's Project Schedule development obligations under Division 1, Section 01311 of the Contract Documents, the Contractor shall submit Shop Drawings, Product Data and Sample submission schedule information to the Architect and Project Manager. The Contractor shall submit, and the Architect and Project Manager will review, the Contractor's submittals in accordance with the Contractor's accepted Preliminary and Detailed Project Schedules, as required under Division 1, Section 01311 of the Contract Documents. The Contractor shall submit no Shop Drawings, Product Data or Samples which do not comply with the Contract Documents.
- 4.12.13.2 No portion of the Work requiring a Shop Drawing, Product Data or Sample submission shall be commenced until such submission has been reviewed, and approved, by the Architect in accordance with Subparagraph 2.2.13. All such portions of the Work shall be in accordance with approved submittals.
- 4.12.13.3 No claim for delay shall be allowed the Contractor on account of failure of the Architect to furnish drawings or approval of Shop Drawings and Samples until at least twenty-one (21) days after submission to the Architect.
- 4.12.14 Shop Drawings, Product Data, and Samples shall be dated and shall bear the name of the Project; a description or the names of equipment, materials and items; and complete identification of locations at which materials or equipment are to be installed.

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- 4.12.15 In submitting for approval the use of any material or device as the equal of some other material or device specified by name, the Contractor shall submit a sample of the material specified and also a sample of the material proposed to be submitted as the equal thereof, together with any supporting data necessary to reasonably allow the Architect and the Project Manager to review the material.
- 4.12.16 In case of devices, samples of which cannot readily be submitted, catalogs and other data, shall be submitted.
- 4.12.17 Any material or device proposed to be substituted shall not be deemed acceptable except by written communication from the Architect and Project Manager.
- 4.12.18 All Work for which samples are required to be submitted and approved shall be executed and performed in conformity with the said approved samples.

4.13 USE OF SITE

- 4.13.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the building or site with any materials or equipment.
- 4.13.2 The Contractor shall coordinate all of his operations with and secure approval from the Project Manager before using any portion of the site.
- 4.13.3 All Work or materials of every description subject to injury during the course of the Work shall be fully protected from damage from any source. In any event, should any Work or materials under this Contract, become damaged in any way or manner the Contractor shall repair and perfect the same at his own expense, and when the entire Contract is completed, the building and premises shall be delivered to the Owner without defects. Any damage which may be caused by the installation of any portion of the Work covered by these specifications and conditions, or by the Contractor shall be satisfactorily made good and repaired by the Contractor without cost to the Owner.
- 4.13.4 The Contractor shall provide and maintain all lights, footways, guards, fences, gates, etc., for the proper protection of the public, and shall comply with all municipal rules, regulations, ordinances and laws, relating to the prosecution of his work.
- 4.13.5 The Contractor shall properly and carefully shore up or otherwise support all live water, sewer and gas pipes, electric wires, free-standing walls, conduit, etc., which may be encountered.
- 4.13.6 The Contractor shall furnish for his use, throughout the entire construction all scaffolding, ladders, decking or runways as needed to perform the Work under this Contract.
- 4.13.7 The Contractor shall construct elevators, cranes and other rigging, concrete lifts, etc., as required for his Work.
- 4.13.8 All such construction shall be carried out as required by the code or authority having jurisdiction. No cranes or other heavy equipment shall be located or moved in such manner as to damage or strain the framework or any part(s) of the proposed building and/or existing building.
- 4.13.9 As construction proceeds, the Project Manager may deem it necessary to have the Contractor move trailers, fences, stored materials, etc., to facilitate the construction. Upon written notice from the Project Manager, this will be done without additional cost to the

Owner.

- 4.13.10 When school is in session the Contractor will be restricted to the areas which do not interfere with school operations. These areas shall be safety and security fenced to not impact school operations. Additional areas may be utilized upon concurrence of the Project Manager. The Contractor shall minimize his impact on the educational program while his work is in progress. Workers must stay out of school while school is in session. All work in the existing school can only take place during the hours approved by the Project Manager
- 4.13.11 The Contractor must maintain interior building fire exits through the construction areas and maintain these exits during all school operation hours, to the satisfaction of the Authorities having Jurisdiction. These exit routes may not be modified without concurrence of the Project Manager and the School Principal.
- 4.13.12 The Contractor must maintain fire equipment access routes open to site and buildings. According to UFC 10.502 fire equipment access and water supplies shall be installed and made serviceable prior to and during the time of construction. This is the Contractor's responsibility to coordinate.
- 4.13.13 The Contractor shall keep the boilers operational while the average outside temperature is below 60° F while the school program is in operation or at any time temperature is below 40° F, to protect facility utility systems.

#### 4.14 CUTTING AND PATCHING OF WORK

- 4.14.1 The Contractor shall be responsible for all cutting, fitting or patching that may be required to complete the Work or to make its several parts fit together properly.
- 4.14.2 The Contractor shall not damage or endanger any portion of the Work or the work of the Owner or any separate contractors by cutting, patching or otherwise altering any work, or by excavation. The Contractor shall not cut or otherwise alter the work of the Owner or any separate Contractor except with the written consent of the Owner and of such separate Contractor. The Contractor shall not unreasonably withhold, from the Owner, or any separate contractor his consent to cutting or otherwise altering the Work.
- 4.14.3 Existing structures and facilities including but not limited to building, utilities, topography, streets, curbs, walks, etc., that are damaged or removed due to required excavations or other construction work, shall be patched, repaired or replaced by the Contractor to the satisfaction of the Project Manager, the owner of such structures and facilities, and authorities having jurisdiction. In event the local jurisdictional authorities require that such repairing and patching be done with their own labor and materials, the Contractor shall abide by such regulations and pay for such work.
- 4.14.4 Whenever, for the convenience of work, an oversized opening has been provided, it shall be the responsibility of the Contractor requesting and requiring such opening to eventually fill unused portions of such openings with the appropriate material and with special attention to penetrations of firewalls. Such repair shall be in accordance with Paragraph 4.14.1.

#### 4.15 CLEANING UP

- 4.15.1 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations. At the completion of the Work he shall remove all his waste materials and rubbish from and about the Project as well as all his

tools, construction equipment, machinery and surplus materials.

4.15.2 If the Contractor fails to clean up during or at the substantial or final completion of his Work, the Owner may do so as provided in Paragraph 6.3 and the costs thereof shall be charged to the Contractor.

#### 4.16 COMMUNICATIONS

4.16.1 The Contractor shall forward all communications to the Architect or the Owner through the Project Manager, except as described under Paragraph 4.12.13.

#### 4.17 ROYALTIES AND PATENTS

4.17.1 The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Project Manager.

#### 4.18 INDEMNIFICATION

4.18.1 To the fullest extent permitted by law, the Contractor shall, at his sole cost and expense, indemnify, hold harmless and defend the Owner, the Municipality of Anchorage and their Board or Assembly members, administrators, representatives, and employees, and the Project Architect and its agents, representatives, and employees from and against all claims, actions, judgments, costs, liabilities, penalties, damages, losses and expenses, including but not limited to attorneys' fees, which arise out of or result from the performance of the Work, and which are:

4.18.1.1 Attributable to bodily injury, sickness, disease or death, or to injury to, pollution of, or destruction of property (other than the Work itself) including the loss of use resulting therefrom; and

4.18.1.2 Caused by the default of the Contractor, or by any act, whether negligent or wrongful, or omission of the Contractor, any Subcontractor, Material Supplier or Vendor, anyone directly or indirectly employed by any of them or anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable.

4.18.2 In any and all claims against the Owner or the Municipality of Anchorage or their Board or Assembly members, administrators, representatives or employees, and the Project Architect and its agents, representatives, and employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 4.18 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor and Subcontractor under worker's compensation acts, disability benefit acts or other employee benefit acts.

#### 4.19 PERSONS AUTHORIZED TO SIGN DOCUMENTS

4.19.1 The Contractor, within five (5) days after the Notice to Proceed shall file with the Project Manager a list of all persons who are authorized to sign documents such as contracts,

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modifications, schedules, certificates, and affidavits on behalf of the Contractor and to fully bind the Contractor to all the Conditions and provisions of such documents, except that in the case of a corporation he shall file with the Project Manager a certified copy of a resolution of the Board of Directors of the corporation in which are listed the names and titles of corporation personnel who are authorized to sign documents on behalf of the corporation and to fully bind the corporation to all the conditions and provisions of such documents. This person, or at least one of these persons, shall be available to meet in Anchorage, Alaska, with the Owner or his representative(s) to discuss, negotiate and/or resolve any Change Order or other Modification to the Contract or any other matter needing resolution by the parties as determined at the sole discretion of the Owner within forty-eight (48) hours after receipt of written notice, at no additional cost to the Owner.

4.20 CONDITIONS AFFECTING THE WORK

- 4.20.1 The Contractor shall be responsible for taking all steps necessary to ascertain the nature and location of the Work and the general and local conditions which can affect the Work or the cost thereof. Failure by the Contractor to fully acquaint himself with conditions which may affect the Work, including, but not limited to conditions relating to transportation, handling, storage of materials, availability of labor, water, roads, weather, topographic and subsurface conditions, multi-prime contract conditions, applicable provisions of law, and the character and availability of equipment and facilities needed prior to and during the execution of the Work, shall not relieve the Contractor of his responsibilities under the Contract Documents and shall not constitute a basis for an adjustment in the Contract Sum or the Contract Time under any circumstances. The Owner assumes no responsibility for any understanding or representation about conditions affecting the Work made by any of his officers, employees, representatives, or agents prior to the execution of the Contract, unless such understandings or representations are expressly stated in the Contract Documents.
- 4.20.2 Until final acceptance by the Owner, the Contractor shall be in complete control of and fully responsible for the Work.
- 4.20.3 The Contractor shall give to the proper authorities all required notices relating to the Work in his charge, and shall be responsible for all acts and events which are violations of the law or which would be violations of the law had the Work been performed or the Project located within the Municipality of Anchorage.
- 4.20.4 Wherever herein mention is made of any article, material or workmanship to be in accordance with the laws, ordinances, building code, Underwriter's Code, and A.S.T.M. Specifications or similar expressions, the requirement of these laws, ordinances, etc., shall be construed as the minimum requirements of these Specifications, and all articles, materials and workmanship required by these laws, ordinances, etc., shall be provided by the Contractor without any additional cost to the Owner.
- 4.20.5 Where the requirements of the laws, ordinances, etc., are mandatory, they shall govern.
- 4.20.6 Where the requirements of the Specifications call for higher grade or are not in conflict with the laws, ordinances, etc., the Specifications shall govern.
- 4.20.7 In case of any apparent conflict between the Specifications and such laws, ordinances, etc., the Contractor shall immediately call the attention of the Project Manager (in writing) to such conflict for decision, before proceeding with any work which may involve such conflict.

END OF ARTICLE 4

ARTICLE 5

SUBCONTRACTORS

5.1 DEFINITION

- 5.1.1 A Subcontractor is a person, organization or entity who has a direct contract with the Contractor to perform any of the Work. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Subcontractor or his authorized representative. The term Subcontractor does not include any separate contractor or his subcontractors.
- 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform any of the Work. The term Sub-subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender and means a Sub-subcontractor or an authorized representative thereof.
- 5.1.3 Nothing contained in the Contract Documents is intended to, nor shall it create, any contractual relationship between the Owner, the Project Manager, the Architect, or any of their agents, employees, or representatives and any Subcontractor or Sub-subcontractor.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

- 5.2.1 The Contractor, in compliance with the requirements of the Contract Documents, shall furnish to the Project Manager in writing the names of the persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each of the principal portions of the Work. The Project Manager will within ten (10) days of receipt of such information reply to the Contractor in writing stating whether or not the Owner, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Project Manager to reply within a reasonable time shall constitute notice of no reasonable objection. The Contractor understands and agrees that no contractual agreement exists for any part of the Work under this Contract between the Owner and any of the Contractor's Subcontractors or Sub-subcontractors. Further, the Contractor understands and agrees that he alone is responsible to the Owner for all of the Work under this Contract and that any review of Subcontractors or Sub-subcontractors by the Owner or Project Manager will not in any way make the Owner responsible to any Subcontractor or Sub-subcontractor, nor responsible for the actions or failures of any Subcontractor or Sub-subcontractor.
  - 5.2.1.1 Within ten (10) days after the Notice to Proceed, the Contractor shall furnish to the Project Manager, in writing, for acceptance by the Owner, a list of names of the Subcontractors, Sub-subcontractors, and Material Suppliers and Vendors, proposed for the principal portions of the Work.
  - 5.2.1.2 Within thirty-five (35) days after Notice to Proceed, the Contractor shall submit to the Project Manager, copies of Purchase Orders or other satisfactory evidence of purchase for all major materials.
- 5.2.2 The Contractor shall not contract with any such proposed person or entity to whom the Project Manager has made reasonable objection under the provisions of this Subparagraph.
  - 5.2.2.1 The Contractor shall not be required to contract with anyone to whom he has a reasonable objection. There shall be no entitlement to additional compensation based upon the Project Manager's reasonable objection made

under this Section.

- 5.2.3 If the Project Manager has reasonable objection to any such proposed person or entity, the Contractor shall submit a substitute to whom the Project Manager has no reasonable objection.
- 5.2.4 The Contractor shall make no substitution for any Subcontractor, person or entity previously selected if the Project Manager makes reasonable objection to such substitution.
- 5.2.5 During the course of the Project the Contractor must notify the Project Manager in writing regarding any changes in any Work by any Subcontractor, Sub-subcontractor, Material Supplier or Vendor.

### 5.3 SUBCONTRACTUAL RELATIONS

- 5.3.1 By an appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by the terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these Documents, assumes toward the Owner. Said agreement shall preserve and protect the rights of the Owner under the Contract Documents with respect to the Work to be performed by the Subcontractor so that the subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the Contractor-Subcontractor agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by these Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with his Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the Subcontract, copies of the Contract Documents to which the Subcontractor will be bound by this Paragraph 5.3, and identify to the Subcontractor any terms and conditions of the proposed Subcontract which may be at variance with the Contract Documents. Each Subcontractor shall similarly make copies of such Documents available to his Sub-subcontractors, Material Suppliers or Vendors.
- 5.3.2 In addition to Sub-Contractual agreement in Paragraph 5.3.1, the Contractor shall allow the Subcontractor, Sub-subcontractor, Material Supplier or Vendor to notify the Project Manager due to failure of payment, unwarranted retainage or deductions of payment or unwarranted lateness of payment.
- 5.3.3 As a condition precedent to the acceptance of the Contractor's proposed Preliminary and Detailed Project Schedules by the Project Manager, each major Subcontractor shall in writing, with the submission of said schedules by the Contractor, confirm that they have reviewed the Contractor's proposed Project Schedules, and that each concurs with the activity breakdowns, durations, cost loading, and logic as relates to each major Subcontractor's scope of the Work and the incorporation of said Work into the Contractor's proposed Preliminary and Detailed Project Schedules, as prescribed under Division 1, Section 01311 of the General Requirements of the contract documents.

### 5.4 PREPARATORY WORK

- 5.4.1 Before starting work, the responsible Subcontractor shall carefully examine all preparatory Work that has been executed to receive his Work. He shall check carefully, by whatever means are required, to ensure that his work and adjacent related Work will finish to proper contours, planes, and levels. He shall promptly notify the Contractor and the Project

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Manager of any defects or imperfections in preparatory Work which will, in any way, affect satisfactory completion of his Work. Absence of such notification will be construed as an acceptance of preparatory work and later claims of defects therein will not be recognized.

5.4.2 Each Subcontractor is required to follow the provisions of 4.3.4 relating to asbestos abatement.

5.5 PAYMENTS TO SUBCONTRACTORS, SUB-SUBCONTRACTORS, AND MATERIAL SUPPLIERS AND VENDORS

5.5.1 If the Project Manager withholds a Certificate for Payment for any cause which is the fault of the Contractor and not the fault of a particular Subcontractor, Sub-subcontractor, and Material Supplier and Vendor, the Contractor shall pay that Subcontractor, Sub-subcontractor, Material Supplier and Vendor on demand, made at any time after the Certificate for Payment should otherwise have been issued, for his work to the extent completed, less any retained percentage.

5.5.2 The Contractor shall pay each Subcontractor, Sub-subcontractor, and Material Supplier and Vendor a just share of any insurance monies received by the Contractor, and he shall require each Subcontractor to make similar payments.

END OF ARTICLE 5

ARTICLE 6

WORK BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS

- 6.1.1 The Owner reserves the right to perform work related to the Project with his own forces, and to award separate contracts in connection with other portions of the Project or other work on the site under these or similar Conditions of the Contract.
- 6.1.2 When separate contracts are awarded for different portions of the Project or other work on the site, the term Contractor in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.
- 6.1.3 Upon transfer of such separate contracts to a General Contractor, if the Owner so desires to transfer such contracts, the Contractor shall be obligated to the conditions as outlined by Paragraph 6.3. of these Conditions.

6.2 MUTUAL RESPONSIBILITY

- 6.2.1 The Contractor shall afford the Owner and separate Contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their Work, and shall connect and coordinate his Work with theirs as required by the Contract Documents.
- 6.2.2 If any part of the Contractor's Work depends for proper execution or results upon the Work of the Owner or any separate contractor, the Contractor shall, prior to proceeding with the Work, promptly report to the Owner any apparent discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report in writing to the Owner shall constitute an acceptance of the Owner's or separate contractors' work as fit and proper to receive his Work, except as to defects which may subsequently become apparent in such work by others.
  - 6.2.2.1 In addition to inspection as to defect, the Contractor, if so deemed necessary by the Contractor, shall measure or inventory work already in place or stored and shall at once report, in writing, to the Project Manager any conflicts between the executed Work and the Contract Documents the Contractor has signed his name thereto.
  - 6.2.2.2 Upon notification from the Owner that a part of the Work furnished under this Contract is not in accordance with the Contract Documents, the Contractor shall immediately initiate action to correct the Work.
  - 6.2.2.3 If the Contractor fails to install his Work in a timely manner, the Owner through the Project Manager may authorize other Contractor(s) to perform their Work out of proper sequence. All extra Work necessary to properly interface with the other Contractor(s)' Work will be accomplished by this Contractor at no additional cost to the Owner.
- 6.2.3 Any costs caused by defective or ill-timed work shall be borne by the Contractor.
- 6.2.4 Should the Contractor wrongfully cause damage to the Work or property of the Owner, or to other Work on the site, the Contractor shall promptly remedy such damage as provided in Subparagraph 10.2.5.

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- 6.2.5 Should the Contractor wrongfully cause damage to the work or property of any separate contractor, the Contractor shall upon due notice promptly attempt to settle with such other Contractor by agreement; or otherwise to resolve the dispute. If such separate Contractor sues or initiates a proceeding against the Owner, the Project Manager and/or the Architect on account of any damage alleged to have been caused by the Contractor, the Owner shall notify the Contractor who shall defend such proceedings at his own expense, and if any judgment or award against the Owner, the Project Manager, and/or the Architect arises therefrom the Contractor shall pay or satisfy it and shall reimburse the Owner, the Project Manager and/or the Architect for all attorneys' fees and court or other costs which the Owner, the Project Manager and/or the Architect have incurred.
- 6.2.6 In the event there is more than one contractor engaged on the Project, each such contractor shall be responsible to the other for damages to work, injury to any person or persons, or for any loss, cost, claims, or damages arising out of or in connection with the Work required by this Contract or any loss, cost, expense, or damage caused by the Contractor's neglect or failure to finish or satisfactorily complete his part of the Work within the time prescribed. In all events, the provisions of Paragraph 4.18 shall be applicable.
- 6.2.7 Whenever the Contractor receives items from another Contractor or from the Owner for storage, erection or installation, the Contractor receiving such items shall give receipt for items delivered, and thereafter will be held responsible for care, storage and any necessary replacing of item or items received.
- 6.2.8 The separate contractors shall establish and maintain communication throughout the course of their Work to assure maximum coordination of the Work performed by each. This includes the approvals of the Work of each as required by proper coordination.
- 6.3 OWNER'S RIGHT TO PERFORM DISPUTED WORK
- 6.3.1 If a dispute arises between the Contractor and separate contractors as to their responsibility for cleaning up as required by Paragraph 4.15 or for accomplishing coordination or doing required cutting, filling, excavating or patching as required by Paragraph 4.14, the Owner may carry out such Work and charge the cost thereof to the contractors responsible therefor as the Owner shall determine to be just.
- 6.4 EQUIPMENT OR WORK NOT IN CONTRACT (NIC)
- 6.4.1 When certain items of equipment and other work are indicated as "NIC" (Not In Contract), or to be furnished and installed under other contracts, any requirements for preparation of openings, provision of backing, etc., for receipt of such "NIC" work, information will be furnished upon written request of the Contractor who shall properly form and otherwise prepare his Work in a satisfactory manner to receive such "NIC" work.
- 6.5 CUTTING AND PATCHING UNDER SEPARATE CONTRACTS
- 6.5.1 Each Contractor shall be responsible for any cutting, fitting and patching that may be required to complete his Work except as otherwise provided in the Contract Documents. The Contractor shall not endanger any human life or portion of the Work performing any cutting, excavating or otherwise altering the Work or any part thereof.

END OF ARTICLE 6

ARTICLE 7

MISCELLANEOUS PROVISIONS

7.1 GOVERNING LAW

7.1.1 Unless otherwise provided in the Contract Documents, the Contract shall be governed by the law of the place where the Project is located.

7.2 SUCCESSORS AND ASSIGNS

7.2.1 The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. The Contractor shall not assign the Contract or sublet it as a whole without the written consent of the Owner, nor shall the Contractor assign any monies due or to become due to him hereunder, without the previous written consent of the Owner.

7.3 WRITTEN NOTICE

7.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or entity or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known to him who gives the notice.

7.4 CLAIMS FOR DAMAGES

7.4.1 Should the Contractor suffer injury or damage to person or property because of any act or omission of the Owner or of any of his employees, agents or others for whose acts he is legally liable, claim shall be made in writing to the Owner, through the Project Manager, within twenty (20) days after the first observance of such injury or damage; otherwise, the Contractor shall have waived any and all rights he may have against the Owner, the Project Manager, the Architect, or their employees, representatives or agents.

7.4.2 Decisions of the Project Manager shall be rendered as provided for under the Contract Documents, but no decision of the Project Manager shall deprive the Owner or the Contractor of any form of redress which may be available under the laws of the State. Any decision of the Project Manager shall be final and binding on the Contractor in the absence of written notice of protest from the Contractor received by the Owner by registered mail, within fifteen (15) days of the date of the decision of the Project Manager. The Owner shall have sixty (60) days from the date of receipt of a formal protest within which to investigate and make reply.

7.5 PERFORMANCE BOND AND PAYMENT BOND

7.5.1 Prior to the execution of the Contract, the Contractor shall furnish to the Owner, on forms acceptable to the Owner, surety bonds in the amounts and for the purposes provided in this Paragraph 7.5. Each bond must be signed by both the Contractor and the Surety. The current power of attorney for the person who signs for the surety company, indicating the monetary limit of such powers, must be attached to the bonds. The Contractor shall pay all premiums and cost thereof and incidental thereto. Such bonds shall be made payable to the Owner. The surety (or sureties) shall be corporate surety(ies) licensed to transact business in Alaska and acceptable to the Owner. Each bond shall be in an amount equal to the Contract Sum. The effective date of the bond shall be on the execution date of the

contract.

- 7.5.2 The "Performance Bond" shall be so conditioned as to assure the faithful performance by the Contractor of all Work under said Contract, within the time limits prescribed, including any maintenance provisions, in a manner that is satisfactory and acceptable to the Owner; that all materials and workmanship supplied by him will be free from original or developed defects; and that should original or developed defects or failures appear within a period of one year from the date of final acceptance of the Work by the Owner, the Contractor shall, at his own expense, make good such defects and failures and make all replacements and adjustments required, within a reasonable time after being notified by the Owner to do so. This bond shall be maintained by the Contractor in full force and effect during the performance of the Work of the Contractor and for a period of two (2) years after the date of final acceptance of the Work by the Owner.
- 7.5.3 The "Payment Bond" shall be so conditioned as to inure to the benefit of persons furnishing materials for or performing labor upon the Work. This bond shall be maintained by the Contractor in full force and effect until the Work is completed and finally accepted by the Owner, and until all claims for materials, labor and subcontracts are paid.
- 7.5.4 Should any surety or sureties upon said bonds become insufficient or be disqualified from doing business in Alaska, the Contractor shall renew said bond or bonds with good and sufficient sureties, acceptable to the Owner, within ten (10) work days after receiving notice that the surety or sureties are insufficient and/or disqualified. Should any surety or sureties be deemed unsatisfactory at any time by the Owner, notice will be given the Contractor to that effect, and he shall forthwith substitute a new surety or sureties satisfactory to the Owner. No further payment shall be deemed due or will be made under this Contract until the new sureties shall qualify and be accepted by the Owner.
- 7.5.5 In the event of any change order resulting in the performance of additional work in connection with the Work, the amounts of such bonds shall be increased by the cost of such additional work or materials or fixtures to be incorporated into the Project.

## 7.6 RIGHTS AND REMEDIES

- 7.6.1 The Contractor's duties and obligations imposed by the Contract Documents and the rights and remedies available thereunder shall be in addition to and not a limitation of any duties, obligations, rights and remedies otherwise imposed or available by law.
- 7.6.2 Except as may be specifically agreed in writing, the failure of the Owner, the Project Manager, or the Architect to insist in any one or more instances upon the strict performance of any one or more of the provisions of this Contract, or to exercise any right herein contained or provided by law, shall not be construed as a waiver or relinquishment of the performance of such provision or right(s) or of the right to subsequently demand such strict performance or exercise such right(s), and the rights shall continue unchanged and remain in full force and effect.
- 7.6.3 The Contractor agrees that he can be adequately compensated by money damages for any breach of this Contract which may be committed by the Owner and hereby agrees that no default, act, or omission of the Owner, the Project Manager or the Architect, except for unauthorized failure to make payments as required by the Contract Documents, shall constitute a material breach of the Contract entitling the Contractor to cancel or rescind the provisions of this Contract or (unless the Owner shall so consent or direct in writing) to suspend or abandon performance of all or any part of the Work. The Contractor hereby waives any and all rights and remedies to which he might otherwise be or become entitled, save only his right to money damages.

## 7.7 TESTS

- 7.7.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any portion of the Work to be inspected, tested, or approved, the Contractor shall give the Architect and Project Manager timely notice, but not less than seventy-two (72) hours, of its readiness so the Architect and the Project Manager may observe such inspection, testing or approval. The Contractor shall bear all costs of such inspections, tests or approvals except as provided in subparagraph 7.7.2. Notification, coordination and execution of all inspections and tests required by the Contract Documents or by the governing building department shall be the sole responsibility of the Contractor. The Owner shall not be responsible for any damage or delay caused by any Party's inability to make required inspections in the time frame desired by the Contractor.
- 7.7.2 Special Inspection and testing as required in accordance with IBC section 1704 shall be coordinated by the Contractor and the Owner shall bear all costs of Special Inspections or approvals. The Special Inspector, designated by the Owner, shall observe the Work assigned for conformance with the approved design drawings and specifications. The Project Manager may order additional Special Inspections, testing, or approval, as required by the authority having jurisdiction by providing notice to the Contractor. The Contractor shall provide notification and coordination for additional Special Inspections as provided in subparagraph 7.7.1. If such special inspection or testing reveals a failure of the Work to comply (1) with the requirements of the Contract Documents, or (2) with respect to the performance of the Work, with laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction, the Contractor shall bear all costs thereof, including compensation of the Owner's administrative and legal expenses, and for the Architect's, the Project Manager's, and the Special Inspector's additional services made necessary by such failure.
- 7.7.3 Inspections and Tests required to establish compliance with the Contract Documents, as provided for in the Contract Documents, will be made by a qualified, independent testing agency approved by the Owner. The cost of the services of such agency will be paid by the Contractor, unless otherwise provided in the Contract Documents. When the initial tests indicate non-compliance with the Contract Documents, any subsequent retesting occasioned by non-compliance shall be performed by the same agency and the costs thereof borne by the Contractor. The Contractor shall provide facilities for such access to the Work in order that the agency may properly perform its functions. Representatives of the testing agency shall have access to the Architect, Project Manager, or Owner at all times.
- 7.7.4 Inspections or testing performed exclusively for the Contractor's convenience shall be the sole cost and responsibility of the Contractor.
- 7.7.5 The independent testing agency, employed as specified in the Technical portion of these specifications, shall prepare the test reports, logs, and certificates applicable to the specific inspections and tests and shall deliver, immediately or within forty-eight (48) hours, as applicable, the specified number of copies of same to the designated parties. Other required certificates of inspection, testing or approval shall be secured by the Contractor and delivered by him to the Project Manager and the Architect, in such time as to not delay progress of the Work or final payment therefor.
- 7.7.6 If the Architect, the Project Manager or the Special Inspector is to observe the inspections, tests or approvals required by the Contract Documents, laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction or that are required to establish compliance with the Contract Documents, he will do so promptly and, where

practicable, at the normal place of testing.

7.7.7 Unless otherwise stipulated in the Contract Documents, the Contractor shall pay for all utilities required for testing of installed equipment of all of his Work and work of each Subcontractor furnishing equipment. Labor and supervision required for making such tests shall be provided at no additional cost to the Owner.

7.7.8 Owner may provide Quality Assurance testing. Contractor shall provide knowledgeable support personnel and cooperate fully with Owner's designated representative in conducting all Quality Assurance tests. If project fails tests, Contractor shall make all necessary corrections to meet test criteria and pay the Owner for all costs associated with additional tests.

## 7.8 ALTERNATES

7.8.1 Alternates may be either additive or deductive.

7.8.2 Alternates, if taken, may be taken in any sequence.

7.8.3 The Contractor shall include in his bid, or bid proposal, a bid for all alternates listed in the Bid Form. These alternates shall include the Contractor's net cost of the labor, materials, overhead and profit, and equipment necessary to perform or delete, the Work as outlined by such alternates.

## 7.9 UNENFORCEABILITY OF ANY PROVISION

7.9.1 If any provision of the Contract is held as a matter of law to be unenforceable, the remainder of the Contract shall be enforceable without such provision.

## 7.10 NO WAIVER BY OWNER

7.10.1 The failure of the Owner in any one or more instances to insist upon the strict performance of any of the terms of this Contract or to exercise any option herein conferred, shall not be construed as a waiver or relinquishment to any extent of the right to assert or rely upon such terms or option on any future occasion.

## 7.11 ASSIGNMENT OF CONTRACT

7.11.1 The Contractor shall not assign the responsibilities of this Contract, either as a whole or in part, nor assign any monies due or to become due to it hereunder, without previous written consent of the Owner.

END OF ARTICLE 7

ARTICLE 8

TIME

8.1 DEFINITIONS

- 8.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for Substantial and Final Completion of the Work as defined in Subparagraph 8.1.3, including authorized adjustments thereto.
- 8.1.2 The date of execution of the Contract Agreement between the Owner and Contractor shall be subsequent to School Board Approval and the Contractor's satisfactory submittals to the Owner of the Certificate of Insurance, the Performance Bond and the Payment Bond as noted in the Invitation to Bidders. The Owner will issue a Notice to Proceed no later than ten (10) days from execution of the Owner-Contractor Agreement by both Owner and Contractor. The date of commencement of the Work shall be the date established by the Notice to Proceed. The Owner shall not be responsible for any costs incurred by the Contractor prior to the Notice to Proceed.
- 8.1.3 The Date of Substantial Completion of the Work or designated portion thereof is the Date certified by the Project Manager and Architect when the Work or a designated portion thereof is sufficiently complete, in accordance with the Contract Documents, so the Owner can fully occupy and utilize the Work or designated portion thereof for the use for which it is intended, with all of the Project's parts and systems cleaned and operable as required by the Contract Documents. Only incidental corrective work and any final cleaning beyond that needed for the Owner's full use may remain for Final Completion.
- 8.1.4 The term day as used in the Contract Documents shall mean calendar day unless otherwise specifically designated. All dates shall mean 12:01 a.m. of the indicated day unless otherwise stipulated.
- 8.1.5 The term "working day" as may be used in the Contract Documents shall mean any day not otherwise defined herein as a non-working day.
- 8.1.6 The term non-working day as may be used in the Contract Documents shall mean Sunday, a recognized holiday, a day on which the Contractor is specifically required to suspend construction operations or a day on which a suspension order is in effect. Recognized holidays shall be: New Year's Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, Christmas Eve (half day), and Christmas Day. When any of the above days fall on a Saturday, the preceding Friday shall be counted as a holiday. When any of the above days fall on a Sunday, the following Monday shall be counted as a holiday.
- 8.1.7 The term "Beneficial Occupancy" is interchangeable with the term Substantial Completion.

8.2 PROGRESS AND COMPLETION

- 8.2.1 All times stated in the Contract Documents are of the essence of the Contract.
- 8.2.2 The Contractor shall begin the Work on the date of commencement as defined in Subparagraph 8.1.2. He shall carry the Work forward expeditiously with adequate forces and shall achieve Substantial Completion and Final Completion in accordance with the Project Schedule Milestone Dates set forth under Section 00200 hereof.
- 8.2.3 Attention is directed to the fact that the Work is urgently needed by the Owner and that time is of the essence; for this reason, it shall be agreed that the Contractor shall

substantially complete all Work under the Contract in accordance with the Project Schedule Milestone Dates set forth under Section 00200 hereof and, that he will complete the contract in all its details for final acceptance as specified after Substantial Completion.

### 8.3 DELAYS AND EXTENSIONS OF TIME

8.3.1 The Contractor shall be entitled to extensions in the time required for performance of the Work as specifically provided in the Contract. Except as otherwise specifically provided under Paragraph 3.4., 12.1, or 8.3.5, the Contractor shall not be entitled to payment or compensation of any kind from the Owner for direct, indirect, impact or consequential damages, including but not limited to costs of acceleration because of hindrance or delay or loss of labor or equipment efficiency or productivity arising out of any hindrance, interference, obstruction, disruption or delay from any source or cause whatsoever, whether such hindrance, interference, obstruction, disruption or delays be reasonable or unreasonable, foreseeable or unforeseeable, or avoidable or unavoidable.

8.3.2 The Contract Time may be adjusted only for changes pursuant to Paragraph 12.1, suspension of Work pursuant to Paragraph 3.4. and delays pursuant to Subparagraph 8.3.3.

8.3.3 Types of delay shall be defined as follows:

8.3.3.1 Actions or inactions of the Owner, or events for which the Owner has assumed contractual responsibility, which would independently delay the date of Substantial Completion beyond the current contractually established date of Substantial Completion shall be designated as Compensable delays.

8.3.3.2 Events which are outside the control of, and without the fault or negligence of either the Owner or the Contractor, which would independently delay the date of Substantial Completion beyond the current Contract Completion Date shall be designated as Excusable delays, as follows:

8.3.3.2.1 Labor disputes and strikes (including strikes affecting transportation), that do, directly and critically affect the progress of the Work; however, any extension of Contract Time on account of an individual labor strike shall not exceed the number of days of said strike.

8.3.3.2.2 Acts of God, tornado, fire, hurricane, blizzard, earthquake, typhoon, or flood that damage completed work or stored materials.

8.3.3.2.3 The Contract Time will not be extended due to normal inclement weather. Unless the Contractor can substantiate to the satisfaction of the Owner that the weather actually encountered by the Contractor was unusually severe considering the full term of the Contract Time using a ten (10) year average of accumulated record mean values from climatological data compiled by the U.S. Department of Commerce, National Oceanic and Atmospheric Administration for the locale of the Project and that such alleged substantially greater than normal inclement weather actually delayed the Work or portions thereof which had an effect upon the Contract Time, the Contractor shall not be entitled to an extension of time.

8.3.3.2.4 Acts of the public enemy, acts of the state, federal or local

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government in its sovereign capacity, and acts of another contractor in the performance of a contract with the Owner relating to the Project.

8.3.3.3 Actions or inactions of the Contractor, or events for which the Contractor has assumed contractual responsibility, which would independently delay the date of Substantial Completion beyond the current Contract Completion Date shall be designated as Non-excusable delays.

8.3.3.4 Concurrent delay is any combination of the above three types of delay occurring on a calendar date, except in cases where the combination consists of two or more instances of the same type of delay occurring on a calendar date.

A delay to the Contractor caused by the acts of another contractor under contract to the Owner will be classified as a compensable delay to the extent said delay meets the requirements of compensable delay as set forth under Subparagraph 8.3.3.1. Also, it is the Owner's belief that the definitions of delay as included in this paragraph comply with all applicable law in the State of Alaska.

8.3.4 Any claim for extension of time shall be made in writing to the Project Manager not more than seven (7) calendar days after commencement of the delay; otherwise it shall be waived. The Contractor shall also provide an estimate of the probable effect of such delay on the progress of the Work. In the case of a continuing delay only one claim is necessary. Any event, action, inaction, or other cause which may give rise to a delay shall constitute a basis for adjustment in:

8.3.4.1 Contract Time, only if it can be demonstrated that the date of Substantial Completion will be delayed beyond the current Contract Completion Date and that the delay is classified as only a Compensable, Excusable, or Concurrent Delay. The Contract Time shall be adjusted by Change Order pursuant to the requirements of Paragraph 8.3 and Division 1, Section 01311; or

8.3.4.2 Contract Amount, only if it can be demonstrated that the Contractor's time-related costs to complete the Work will be increased and the delay is classified as only a Compensable Delay. The Contract Sum shall be adjusted by Change Order pursuant to the requirements of Subparagraphs 8.3 and 12.3.

8.3.5 All time limits stated in the Contract Documents are of the essence of this Contract. The failure of the Contractor to complete the Work in conformance with the Contract shall result in damages suffered by the Owner due to delays in completion of the Work.

8.3.5.1 If the Contractor fails to substantially complete the Work in conformance with the Contract Documents and the Owner nevertheless permits the Contractor to continue performance of the Work, such permission shall neither modify nor waive the Owner's right to assess and collect, and the Contractor's obligation to pay liquidated damages.

8.3.5.2 The Owner shall be entitled to claim against the Contractor for any liquidated damages incurred. The Owner cannot anticipate at this time what liquidated damages may occur or what the per diem cost of these damages might be. Determination of liquidated damage details will be a matter of proof should the issue arise.

8.3.5.3 The Owner shall recover said liquidated damages by deducting the amount

thereof from any monies due or that may become due the Contractor. In the event the remaining balance due the Contractor is insufficient to cover the full amount of assessed damages, then the Contractor or his Surety shall pay the amount due and the Owner shall be entitled to any and all rights and remedies available to it in law or equity to recover same.

#### 8.4 RESPONSIBILITY FOR COMPLETION

- 8.4.1 The Contractor shall furnish such manpower, materials, facilities and equipment and shall work such hours, including night shifts, overtime operations and Sundays and holidays, as may be necessary to insure the progress and completion of the Work in accordance with the accepted and currently updated progress schedule. If Work actually in place falls behind the currently updated and accepted progress schedule and it becomes apparent from the current schedule that the Work will not be completed in accordance with the Contract Time, the Contractor agrees that he will, as necessary, take some or all of the following actions at no additional cost to the Owner, as required to substantially eliminate the schedule slippage deficiency:
- 8.4.1.1 Increase manpower in such quantities and crafts as will substantially eliminate in the opinion of the Project Manager the schedule slippage deficiency;
  - 8.4.1.2 Increase the number of working hours per shift, shifts per working day, working days per week, or the amount of equipment, or any combination of the foregoing sufficiently to substantially eliminate, in the opinion of the Project Manager the schedule slippage deficiency; and,
  - 8.4.1.3 Reschedule activities to achieve maximum practical concurrence of accomplishment of activities.
- 8.4.2 The Project Manager may require the Contractor to submit a recovery schedule in accordance with Section 01311 of the Specifications, demonstrating his program and proposed plan to make up the slippage in scheduled progress and to ensure completion of the Work in accordance with the requirements of the Contract. If the Project Manager finds the proposed plan not acceptable, he may require the Contractor to submit a new plan. If the actions taken by the Contractor or the second plan proposed are not satisfactory, the Project Manager may require the Contractor to take any of the actions set forth in this Paragraph 8.4 without additional cost to the Owner, to make up the slippage in scheduled progress.
- 8.4.3 Failure of the Contractor to substantially comply with the requirements of this Paragraph 8.4 may be considered grounds for a determination by the Owner, pursuant to Clause 14.1, that the Contractor is failing to prosecute the Work with sufficient diligence to ensure its in accordance with the Project Milestone Dates set forth under Section 00200 hereof.

END OF ARTICLE 8

ARTICLE 9

PAYMENTS AND COMPLETION

9.1 CONTRACT SUM

9.1.1 The Contract Sum is stated in the Owner-Contractor Agreement and, including authorized adjustments thereto, is the total amount payable by the Owner to the Contractor for the performance of the Work under the Contract Documents.

9.2 SCHEDULE OF VALUES

9.2.1 Before the first Application for Payment, the Contractor shall submit to the Owner, through the Project Manager, a schedule of values allocated to the various portions of the Work, as set forth in Division 1, Section 01370 of the General Requirements entitled "Schedule of Values" and supported by such data to substantiate its accuracy as the Architect, Project Manager and the Owner may require. This schedule, unless objected to by the Architect, Owner, or Project Manager, may be used as a basis for the Contractor's Applications for Payment except as otherwise noted under Division 1, Section 01311. The Schedule of Values shall be prepared in such a manner that each major item of work and each subcontracted item of work is shown as a single item on the Application and Certificate of Payment.

9.3 APPLICATIONS FOR PAYMENT

9.3.1 Prior to the date for each progress payment established in the Contract Documents, the Contractor, in accordance with Division 1, Section 01311 of the General Requirements entitled "Project Schedule," shall submit to the Project Manager an itemized Application for Payment, notarized if required, supported by such data substantiating the Contractor's right to payment as the Project Manager and the Architect may require, and reflecting retainage, if any, as provided elsewhere in the Contract Documents. The form of Application for Payment shall be Anchorage School District Forms 100, 100A, 100B and 100C and the computer-produced Cost Report updated in accordance with Division 1, Section 01311.

9.3.2 If the Project Manager finds that satisfactory progress is not being made, he may require retainage of up to 10% of the total amount earned on all subsequent progress payments. This retainage may be released at such time as the Project Manager finds that satisfactory progress is being made.

9.3.3 Payments may be authorized by the Project Manager at his discretion, on account of materials or equipment not incorporated in the Work but delivered and suitably stored at the site by the Contractor. Payments for materials or equipment stored on the site shall only be considered upon submission by the Contractor of satisfactory evidence that he has acquired title to such material, that it will be utilized on the Work under this Contract and that it is satisfactorily stored, protected, and insured or that other procedures satisfactory to the Project Manager that will protect the Owner's interests have been taken.

9.3.4 The Contractor warrants that title to all Work, materials and equipment covered by an Application for Payment will pass to the Owner either by incorporation in the construction or upon the receipt of payment by the Contractor, whichever occurs first, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 9 as "liens"; and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing Work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise

imposed by the Contractor or such other person.

#### 9.4 APPROVAL OF PAY APPLICATION

- 9.4.1 The Project Manager will, after receipt of the Contractor's Application for Payment, and within the time set forth in Division 1, Section 01311 of the General Requirements entitled "Project Schedule," either approve the Application for its full amount or notify the Contractor in writing of his reasons for withholding approval, in whole or in part, as provided in Subparagraph 9.6.1.
- 9.4.2 The submission and acceptance of the Contractor's Preliminary and Detailed Progress Schedules and monthly updates thereof as required by Division 1, Section 01311 of the General Requirements entitled "Project Schedule," shall be an integral part and basic element of the application upon which progress payments shall be made. If in the judgment of the Project Manager the Contractor fails or refuses to provide information required to accomplish a complete Project Schedule Update or revision thereto as specified under Division 1, Section 01311 of the General Requirements, the Contractor shall be deemed to have not provided the information necessary to enable the Project Manager and the Architect to properly evaluate the Contractor's progress, and shall not be entitled to progress payments until it has furnished the information necessary for a complete Project Schedule Update or revision thereto as specified herein to the satisfaction of the Project Manager.
- 9.4.3 The signing of an Application for Payment will constitute a representation by the Project Manager and the Architect, based on their observations at the site and the data comprising the Application for Payment, that the Work has progressed to the point indicated; that, to the best of their knowledge, information and belief, the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to the results of any subsequent tests required by or performed under the Contract Documents, to minor deviations from the Contract Documents correctable prior to completion, and to any specific qualifications stated in their Certificate); and that the Contractor is entitled to payment in the amount certified. However, by approving an Application for Payment, the Project Manager and the Architect shall not thereby be deemed to represent that either has made exhaustive or continuous on-site inspections to check the quality or quantity of the Work or that either has reviewed the construction means, methods, techniques, sequences or procedures, or that either has made an examination to ascertain how or for what purpose the Contractor has used the monies previously paid on account of the Contract Sum.

#### 9.5 PROGRESS PAYMENTS

- 9.5.1 After an Application for Payment has been approved, the Owner shall make payment within thirty (30) calendar days.
- 9.5.2 The Contractor shall promptly pay each Subcontractor (including suppliers, laborers, and material-men) performing labor or furnishing material for the Work, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's Work, the amount to which said Subcontractor is entitled, reflecting the percentage actually retained, if any, from payments to the Contractor on account of such Subcontractor's Work. The Contractor shall, by an appropriate agreement with each Subcontractor, also require each Subcontractor to make payments to his Sub-subcontractors in similar manner.
- 9.5.3 The Owner may, on request and at his discretion, furnish to any Subcontractor, Sub-subcontractor, or Material Supplier and Vendor, if practicable information regarding the

percentages of completion or the amounts applied for by the Contractor and the action taken thereon by the Project Manager on account of Work done by such Subcontractor, Sub-subcontractor, or Material Supplier or Vendor.

- 9.5.4 Neither the Owner, the Project Manager, nor the Architect shall have any obligation to pay or to see to the payment of any monies to any Subcontractor except as may otherwise be required by law.
- 9.5.5 No approval for a progress payment, nor any progress payment, nor any partial or entire use of occupancy of the Project by the Owner, shall constitute an acceptance of any Work not in accordance with the Contract Documents.
- 9.5.6 The Contractor agrees to keep the Work and the site(s) on which Work is to be performed free and clear of all liens and claims of liens on materials furnished pursuant to the Contract Documents. Contractor hereby waives any right it may have in connection with the Work to file any liens, mechanics or otherwise. Notwithstanding anything to the contrary contained in the Contract Documents, if any such lien is filed or there is any reason to believe that any lien may be filed at any time during the progress of the Work or within the duration of this Contract, the Owner may refuse to make any payment otherwise due to Contractor or withhold from any payment due the Contractor a sum sufficient in the opinion of the Owner to pay all obligations and expenses necessary to satisfy such lien or claim and completely indemnify the Owner against any such lien or claim unless and until Contractor shall thereof, if any, has been satisfied, discharged and released of record or that the Contractor has caused such lien to be released or record if and as provided by law pending the resolution of any dispute between Contractor and the person filing such lien; and if such evidence is not furnished by Contractor to the Owner within a period of five (5) days after demand to do so, the Owner may discharge such indebtedness and deduct the amount required therefore, together with any and all losses, costs, damages and attorney's fees suffered or incurred by the Owner from any sum payable to Contractor under the Contract Documents. Final payment to Contractor may be withheld until the Work and the site(s) on which the Work is to be performed are free and clear of any and all liens for rights thereto arising because of Work performed or materials furnished under the Contract Documents. This Subparagraph 9.5.6 shall be specifically included in all subcontracts and purchase orders entered into by Contractor.
- 9.5.7 No reference to a claim or claims of lien or to the Owner's right to withhold payments to the Contractor or to discharge the Contractor's debts to Subcontractors, in Subparagraph 9.5.6, or elsewhere in the Contract Documents, shall be interpreted as a waiver of the Owner's right to exemption pursuant to AS 09.38.015(c) or any requirements with regard to the filing of claims of lien as set forth in AS 34.35.

## 9.6 PAYMENTS WITHHELD

- 9.6.1 The Architect and the Project Manager may decline to approve an Application for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in their opinion they are unable to make representations to the Owner as provided in Subparagraph 9.4.3. If the Project Manager and the Architect are unable to make representations to the Owner as provided in Subparagraph 9.4.3 and to certify payment in the amount of the Application, they will notify the Contractor as provided in Subparagraph 9.4.1.

If the Contractor, Project Manager and the Architect cannot agree on a revised amount, the Project Manager will promptly approve the Application for Payment for the amount for which he is able to make such representations to the Owner. The Project Manager may also decline to certify payment or, because of subsequently discovered evidence or

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subsequent observations, he may nullify the whole or any part of any approval of an Application for Payment previously issued to such extent as may be necessary in his opinion to protect the Owner from loss because of:

- 9.6.1.1 Defective work not remedied,
  - 9.6.1.2 Third-party claims filed or reasonable evidence indicating probable filing of such claims,
  - 9.6.1.3 Failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment,
  - 9.6.1.4 Reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum,
  - 9.6.1.5 Damage to the Owner or another contractor,
  - 9.6.1.6 Reasonable evidence that the Work will not be completed within the Contract Time,
  - 9.6.1.7 Failure or refusal of the Contractor to carry out the Work in accordance with the Contract Documents, including scheduling, project management, or coordination requirements,
  - 9.6.1.8 Liens filed for any portion of the Work, or
  - 9.6.1.9 Failure or refusal of the Contractor to fully comply with Division 1, Section 01311 of the General Requirements entitled "Schedules and Reports".
- 9.6.2 When the above grounds in Subparagraph 9.6.1 are removed, payment shall be made for amounts withheld because of them.

9.7 FAILURE OF PAYMENT

- 9.7.1 If the Owner does not pay the Contractor within seven (7) days after the date established in the Contract Documents any amount certified by the Architect and the Project Manager, then the Contractor may, upon seven (7) additional days' written notice to the Owner and the Architect, stop the Work until payment of the amount not in dispute has been received. The Contractor shall not refuse or fail to diligently proceed with the Work pending the resolution of any amount(s) in dispute unless agreed to by the Owner.

9.8 SUBSTANTIAL COMPLETION

- 9.8.1 When the Contractor considers that the Work, or a designated portion thereof which is acceptable to the Owner, is substantially complete as defined in Subparagraph 8.1.3, the Contractor shall prepare for submission to the Project Manager a list of items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents. When the Architect and the Project Manager on the basis of an inspection jointly determine that the Work or designated portion thereof is substantially complete, the Architect will then prepare a Certificate of Substantial Completion which shall establish the Date of Substantial Completion, shall state the responsibilities of the Owner and the Contractor for security, maintenance, heat, utilities, correction of punchlist items and damage to the Work, and insurance, and shall fix the time within which the Contractor shall complete the items listed therein. Warranties required by the Contract Documents shall

commence on the Date of Substantial Completion of the work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Owner and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.

- 9.8.2 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Project Manager and the Architect, the Owner shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof, as provided in the Contract Documents.
- 9.8.3 The acceptance of Substantial Completion payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the Application for Payment for Substantial Completion, and except for the retainage sums due at final acceptance if any.

## 9.9 FINAL COMPLETION AND FINAL PAYMENT

- 9.9.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Architect and the Project Manager will promptly make such inspection and, when they find the Work acceptable under the Contract Documents and the Contract fully performed, they will jointly issue a final Certificate for Payment stating that to the best of their knowledge, information and belief, and on the basis of their observations and inspections, the Work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, as noted in said final Certificate, is due and payable. The final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Subparagraph 9.8.2 have been fulfilled.
- 9.9.2 Neither the final payment nor the remaining retained percentage shall become due until the Work is free and clear of any and all liens and the Contractor submits to the Owner (1) an affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety, if any, to final payment and (3), if required by the Project Manager, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens arising out of the Contract, to the extent and in such form as may be designated by the Project Manager. If any Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify him against any loss. If any such lien or claim remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the latter may be compelled to pay in discharging such lien or claim, including all costs and reasonable attorney's fees. The Owner may withhold from the final payment any sum that the Owner has reason to believe may be needed to satisfy any lien, claim or threat of lien arising from the Work. The Owner may deduct from the final payment an amount equal to any costs, expenses and attorneys' fees incurred by the Owner in removing or discharging any liens arising from the Work.
- 9.9.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor, or by the issuance of change orders affecting final completion, and the Owner so confirms, the Owner shall, upon application by the Contractor and certification by the Project Manager and the Architect, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than the retainage stipulated in the Contract Documents, and if bonds have been furnished as provided in Paragraph 7.5, the written consent of the surety to the

payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Project Manager prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

- 9.9.4 The making of final payment shall constitute a waiver of all claims by the Owner against the Contractor except those arising from:
  - 9.9.4.1 Unsettled liens, and claims against the Owner, the Project Manager, or the Architect, or their employees, agents, or representatives,
  - 9.9.4.2 Faulty or defective Work appearing after Substantial Completion,
  - 9.9.4.3 Failure of the Work to comply with the requirements of the Contract Documents,
  - 9.9.4.4 Terms of any warranties contained in or required by the Contract Documents,
  - 9.9.4.5 Liquidated damages due the Owner for the Contractor's delay in completion, or
  - 9.9.4.6 Damages incurred by the Owner resulting from lawsuits brought against the Owner, the Project Manager, the Architect, or their agents, employees or representatives because of failures or actions on the part of the Contractor, his Subcontractors, Sub-subcontractors, Material Suppliers and Vendors, or any of their employees, agents or representatives.
- 9.9.5 The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and identified by the Contractor as unsettled at the time of the final Application for Payment.
- 9.9.6 Final Completion includes, but is not limited to, the Contractor obtaining an unconditional Certificate of Occupancy from the governing building official.
- 9.10 OWNER'S RIGHT TO OCCUPY INCOMPLETE WORK
  - 9.10.1 Should the Project, or any portion thereof, be incomplete for Beneficial Occupancy or Final Completion at the scheduled date or dates, the Owner shall have the right to occupy any portion of the Project. In such an event, the Contractor shall not be entitled to any extra compensation on account of said occupancy by the Owner or by the Owner's normal full use of the Project, nor shall the Contractor interfere in any way with said normal full use of the Project. Further, in such an event, the Contractor shall not be entitled to any extra compensation on account of the Owner's occupancy and use of the Project, nor shall the Contractor be relieved of any responsibilities of the Contract including the required times of completion. Such occupancy by the Owner would not, in itself, constitute Beneficial Occupancy nor Final Completion.
  - 9.10.2 If the Owner exercises his rights under the foregoing and occupies the full project, then there shall be no liquidated damages due to delay on account of failure on the Contractor's part to provide Beneficial Occupancy from that date forward. This provision does not affect, however, any damages due to delay that would be assessed for any period of time between the scheduled date of Beneficial Occupancy and the date of any such actual occupancy. Further, this provision would have no effect on actual damages assessed on account of late Final Completion.

## 9.11 RETENTION AND INSPECTION OF RECORDS

### 9.11.1 Inspection.

The Anchorage School District, or any of its duty authorized representatives, shall have the right to examine all project records and documents, including without limitation, all books, correspondence, reports, analyses, instructions drawings, receipts, vouchers, memoranda, and all financial and accounting books, records, and data and all other documents of both the Contractor and the Contractors, Subcontractors and any Sub-subcontractors which are directly pertinent to this specific Contract for the purpose of making an audit, examination, reproduction, excerpts, or transcriptions. All required records shall be retained by the Contractor and its first tier Subcontractors for three (3) years after the Owner makes final payments and all other pending matters are closed.

### 9.11.2 Retention and Maintenance.

The Contractor shall keep and maintain in safe condition full and accurate records of all costs incurred and items billed and all other project records and documents relating to performance, communications, and correspondence in connection with the performance of the Work under this Contract, which records and documents shall be open to review, examination or audit by the Owner or its authorized representatives during performance of the Work and until three (3) years after Final Payment and all other pending matters are closed.

### 9.11.3 Subcontractor Records.

The Contractor shall make it a condition of all subcontracts and sub-subcontracts relating to the Work under this Contract that any and all Subcontractors and sub-subcontractors will keep accurate records of costs incurred and items billed in connection with their work and that such records shall be open to review, examination, reproduction or audit by the Owner or its authorized representatives during performance of the Work and until three (3) years after Final Payment under the subcontract and all other pending matters are closed.

### 9.11.4 Availability.

The Contractor shall make available at its business office upon request at all reasonable times the materials described in this Article including materials of both the Contractor and its first tier Subcontractors, for review, examination reproduction or audit for a period of three (3) years after Final Payment under this Contract and all other pending matters are closed.

### 9.11.5 Termination.

If this Contract is completely or partially terminated, the records relating to the Work terminated shall be made available for three (3) years after any resulting final termination settlement.

### 9.11.6 Claims and Appeals.

Records pertaining to any settlement, mediation, arbitration, litigation or appeals of claim submitted pursuant to Paragraphs 12.4 or 12.5 or otherwise arising from or relating to the performance of Work under this Contract shall be made available until such settlement, mediation, arbitration, litigation, or appeals are finally concluded. Such documents or records shall be made available to the Anchorage School District or its duty authorized representatives within thirty (30) days of the Anchorage School District's request.

9.11.7 Subcontracts.

The Contractor shall include the provisions of this Article in all first tier Subcontracts so as to be binding on all first tier Subcontractors.

9.11.8 Cost or Pricing Data.

If the Contractor has submitted cost or pricing data in connection with the pricing of any change order or modification to this Contract - unless the pricing was based on—

9.11.8.1 adequate price competition, or

9.11.8.2 established catalog or market price of commercial items sold in substantial quantities to the general public; or

9.11.8.3 prices set by law or regulation -

the Anchorage School District or a representative who is an employee of the Anchorage School District, shall have the right to examine and audit all books, records, documents, and other data of the Contractor, including computations and projections, related to negotiating, pricing, or performing the change order or modification, in order to evaluate the accuracy, completeness, and currency of the cost or pricing data.

END OF ARTICLE 9

ARTICLE 10

PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 The Owner, the Project Manager, the Architect, or their agents, employees or representatives are not responsible for the means, methods, techniques, sequences or procedures utilized by the Contractor, or for safety precautions and programs in accordance with the Work. The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work.

10.2 SAFETY OF PERSONS AND PROPERTY

10.2.1 The Contractor shall take all reasonable precautions for the safety of, and shall provide all reasonable protection to prevent damage, injury or loss to:

10.2.1.1 All employees on the Work and all other persons who may be affected thereby;

10.2.1.2 All the Work and all materials and equipment to be incorporated therein, whether in storage on or off the site, under the care, custody or control of the Contractor or any of his Subcontractors or Sub-subcontractors; and

10.2.1.3 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.

10.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations and lawful orders of any public authority bearing on the safety of persons or property or their protection from damage, injury or loss.

10.2.2.1 The Contractor shall contact the State Historic Preservation Office (907-269-8700) immediately, should cultural or paleontological resources be discovered as a result of performing the Work.

10.2.3 The Contractor shall erect and maintain, as required by existing conditions and progress of the Work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

10.2.4 When the use or storage of explosives or other hazardous materials or equipment is necessary for the execution of the Work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.

10.2.5 The Contractor shall promptly remedy all damage or loss to any property referred to in paragraphs 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, any Subcontractor, any Sub-subcontractor, any Material Supplier or Vendor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable and for which the Contractor is responsible under paragraphs 10.2.1.2 and 10.2.1.3, except damage or loss attributable to the acts or omissions of the Owner, Project Manager or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to his obligations under Paragraph 4.18.

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- 10.2.6 The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner through the Project Manager.
- 10.2.7 The Contractor shall not load or permit any part of the Work to be loaded so as to endanger its safety.
- 10.2.8 Following the Notice to Proceed, the Contractor is required to obtain facility keys and the security system access code from ASD Operations Department and obtain the facility keys by contacting the Project Manager.
- 10.2.8.1 A unique security code will be assigned to the Contractor. The ASD Operations office, 1301 Labar, will assign the code and provide access training.
- 10.2.8.2 The Contractor's signature on the key receipt acknowledges liability for the Owner's loss or damage due to unauthorized access with the facility key(s) and/or access code issued to the Contractor. The Contractor's Superintendent is solely responsible for the opening and closing of the facility.
- 10.2.8.3 Lost or stolen key(s) issued to the Contractor are to be reported immediately to the Project Manager. A written report shall be required for each incident.
- 10.2.8.4 If a FOB is issued, instead of keys, and is lost or stolen, the Contractor is required to immediately report the loss to the Project Manager. Notice is to be completed, in writing, within 12 hours or there will be a \$500 fine.
- 10.2.8.5 Upon completion of the Project and prior to final payment, the Contractor will return all key(s) to the Project Manager. A maximum per facility charge of up to \$10,000 may apply to any key not returned to the Project Manager.
- 10.2.8.6 Do not put any identifying tags or markers on the keys that would identify them as ASD building keys.

10.3 EMERGENCIES

- 10.3.1 In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 8 for Time, and Article 12 for Changes in the Work.

END OF ARTICLE 10

ARTICLE 11

INSURANCE

11.1 GENERAL

11.1.1 Before signing this Contract, or commencing work on any project or allowing any Subcontractor to commence work, the Contractor shall obtain all insurance required under this section. The Contractor shall maintain this insurance until Final Acceptance. Proof of Insurance will be required prior to performing work under the warranty. The Contractor shall file with Owner as verification of insurance, an original signed certificate of insurance showing the type and amounts of insurance, the policy number, and expiration date. The Contractor shall provide copies of each insurance policy if requested by the Owner. The Contractor shall purchase insurance from companies reasonably acceptable to the Owner and authorized to do business in the State of Alaska, possessing a Best's policyholder's rating of A- or better and a financial rating of not less than VII.

11.2 WORKERS' COMPENSATION INSURANCE

11.2.1 The Contractor shall purchase and maintain during the life of this Contract, Workers' Compensation Insurance for all employees who will work on this project and if any work is sublet, the Contractor shall require the Subcontractor to provide similar Workers' Compensation Insurance for employees. Such workers' compensation insurance shall meet the statutory requirements of the State of Alaska.

11.3 PUBLIC AND EMPLOYER LIABILITY INSURANCE

11.3.1 The Contractor and his Subcontractors, if any, shall purchase and maintain such Public and Employer Liability Insurance as will protect the Contractor against loss which may result from claims for damages from operations under this Contract, whether such operations be those of the Contractor, a Subcontractor, or any person directly or indirectly employed by them. Such liability insurance shall have a scope of coverage at least as broad as the current ISO form # CG 0001 (occurrence version) for General Liability and the current ISO form # CA 0001 for Automobile Liability, and in minimum limits specified in Paragraph 11.3.2.

11.3.2 Public and Employer Liability Insurance Requirements

11.3.2.1 Commercial General Liability

Combined Single Limit \$1,000,000  
Annual Aggregate \$2,000,000

11.3.2.2 Comprehensive Auto Liability

Including all owned, hired and non-owned vehicles.  
Combined Single Limit \$1,000,000 each accident

11.3.2.3 Employer's Liability Insurance  
\$1,000,000 limit

11.3.3 Umbrella Liability

11.3.3.1 The Contractor shall maintain an umbrella liability policy according to the following:

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Projects < \$10 million construction cost – \$5,000,000 per occurrence and annual aggregate.

Projects > \$10 million construction cost – \$10,000,000 per occurrence and annual aggregate.

This requirement does not apply to Subcontractors.

- 11.3.3.2 Umbrella liability insurance shall be maintained in effect until final acceptance by the Owner of the completed construction, and for products liability and completed operations liability, a minimum of two years thereafter.

11.4 BUILDERS RISK INSURANCE

11.4.1 The Contractor shall purchase and maintain an all risk Builder's Risk policy on all construction projects. The Builders Risk coverage shall be in an amount equal to the initial contract, plus any contract modifications, and the cost of materials supplied or installed by others. Perils insured must be all physical loss and will include earthquake, flood, testing and startup, resultant damage from errors in design, plans or specifications, and transit and offsite storage.

11.4.2 A loss insured under Subparagraph 11.4.1 shall be adjusted by the Insurer, or by the Contractor as Fiduciary, and made payable to the Contractor as Fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Subparagraph 11.4.5. The Contractor shall pay each Subcontractor a just share of any insurance monies received by the Contractor, and by appropriate agreement, written where legally required for validity, shall require each Subcontractor to make payments to his Sub-subcontractors in similar manner.

11.4.3 The Owner and Contractor shall waive all rights against each other for damages caused by fire or other perils to the extent covered by insurance obtained pursuant to this Paragraph 11.4 or any other property insurance applicable to the Work, except such rights as they may have to the proceeds of such insurance held by the Contractor as Fiduciary. The Contractor shall require, by appropriate agreement, written where legally required for validity, similar waivers in favor of the Owner and the Contractor by Subcontractors and Sub-subcontractors. With respect to the waiver of rights of recovery, the term Owner shall be deemed to include, to the extent covered by property insurance applicable thereto, his consultants, employees, agents and representatives, including the Project Manager. The Contractor waives as against any separate Contractor described in Article 6 all rights for damages caused by fire or other perils in the same manner as is provided above as against the Owner. The Owner shall require, by appropriate agreement, written where legally required for validity, similar waivers in favor of the Contractor by any separate Contractor and his Subcontractors and Sub-subcontractors.

11.4.4 If required in writing by any party in interest, the Contractor as Fiduciary shall, upon the occurrence of an insured loss, give bond for the proper performance of his duties. He shall deposit in a separate account any money so received, and he shall distribute it in accordance with a court order or award. If after such loss no other special agreement is made, replacement of damaged work shall be covered by an appropriate Change Order.

11.4.5 The Contractor as Fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within five (5) days after the occurrence of loss to the Owner's exercise of this power, and if such objection is made, the matter shall be decided by a court of competent jurisdiction or as parties in interest

otherwise agree. The Contractor as Fiduciary shall, in that case, make settlement with the insurers accordingly.

11.4.6 If the Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion thereof, such occupancy shall not commence prior to a time mutually agreed to by the Owner and Contractor and to which the insurance company or companies providing the property insurance have consented by endorsement of the policy or policies. This insurance shall not be canceled or lapsed on account of such partial occupancy. Consent of the Contractor and of the insurance company or companies to such occupancy or use shall not be unreasonably withheld.

## 11.5 CERTIFICATE OF INSURANCE REQUIREMENTS

11.5.1 Each insurance policy required in this section will be evidenced by a certificate of insurance which contains the following:

11.5.1.1 Notice of cancellation to the Anchorage School District in accordance with Alaska Statutes 21.36.220 and .260.

11.5.1.2 Contract number.

11.5.1.3 Project location.

11.5.1.4 Waiver of Subrogation. All policies, except where prohibited, will include a Waiver of Subrogation in favor of the District.

11.5.1.5 Additional Insured. All policies except Workers Compensation and professional liability will note the District as an additional insured.

## 11.6 OWNER'S RIGHT TO INSURE

11.6.1 In the event Contractor neglects, refuses, or fails to provide the insurance required under the Contract Documents, or if such insurance is canceled for any reason, the Owner shall have the right, but not the duty to procure the same, and the costs thereof shall be deducted from monies then due or thereafter to become due the Contractor.

## 11.7 ADDITIONAL INSURANCE

11.7.1 If not covered by the above insurance, the Contractor must obtain additional Insurance for items stored off-site or in transit. Payments for materials stored off-site will not be made unless Contractor provides documentation of valid insurance coverage for same.

## 11.8 ASBESTOS ABATEMENT SUBCONTRACTOR'S CERTIFICATE OF INSURANCE

11.8.1 After the Intent to Award Notification, the low bidder shall submit an insurance binder of insurance certificate provided by the proposed asbestos abatement subcontractor's insurance company stating that upon execution of the Contract the types and amount of insurance required elsewhere in these specifications will immediately become effective.

The asbestos abatement subcontractor is required to carry a minimum of \$1,000,000 of General Public Liability Insurance with no exclusion for asbestos abatement.

11.8.2 Comprehensive General Liability Minimum Limits

Bodily Injury and Property Damage \$2,000,000 per occurrence  
Premises Operations

Independent Contractors  
Products - Completed Operations  
Contractual Liability  
Broad Form Property Damage - Lloyds Form  
Explosion, Collapse, and Underground  
Personal Injury

11.8.3 Comprehensive Auto Liability

Including all owned, hired, and non-owned vehicles  
Combined single limit per accident \$1,000,000

END OF ARTICLE 11

ARTICLE 12

CHANGES IN THE WORK AND CONTRACT SUM AND TIME

12.1 CHANGES IN THE WORK

12.1.1 The Owner may, at any time, without notice to the sureties, make any change in the Work within the general scope of the Contract, including, but not limited to changes:

12.1.1.1 In the Specifications or Drawings;

12.1.1.2 In the method or manner of performance of the Work;

12.1.1.3 In the Owner-furnished facilities, equipment, materials, services or site; or

12.1.1.4 Directing acceleration in the performance of the Work for reasons other than delays caused by the Contractor.

12.1.2 All such changes in the Work shall be performed under the applicable conditions of the Contract Documents and shall be authorized in one of the following manners:

12.1.2.1 Field Directive. The Project Manager may issue a written Field Directive to the Contractor that directs a change in the Work. If the Contractor believes that the requested change will increase the Contract Time or Contract Sum, he must notify the Project Manager in writing prior to implementing the change.

12.1.2.2 Information Bulletin. The Architect may issue an Information Bulletin to the Contractor that clarifies or modifies the plans or specifications. If the Contractor believes that the clarification or modification of plans or specifications will increase the Contract Time or Contract Sum, he must notify the Project Manager in writing prior to implementing the change.

12.1.2.3 Request for Information (RFI). The Contractor may submit a RFI to the Project Manager or Architect using the ASD Procore Construction Management Program to request clarification of plans or specifications or to point out areas of apparent conflict or other concerns relating to the Work. The response to the RFI by the Architect or Project Manager may clarify or modify the plans or specifications. If the Contractor believes that the clarification or modification of plans or specifications will increase the Contract Time or Contract Sum, he must notify the Project Manager in writing prior to implementing the change.

12.1.2.4 Request for Proposal (RFP). The Owner may issue an RFP to the Contractor that directs a change in the Work and requests the Contractor's evaluation of the impact of the change on Contract Time or Contract Sum. If the Contractor believes that the Work required by the RFP will increase the Contract Time or Contract Sum, he must notify the Project Manager in writing prior to implementing the changes.

12.1.3 Except as provided in Subparagraph 12.1.2, no order, statement or conduct of the Owner, Project Manager or Architect shall be treated as a change or entitle the Contractor to an equitable adjustment hereunder. No oral agreement of any kind shall be construed as a Change Order.

12.2 AMENDING CONTRACT SUM OR TIME

12.2.1 If any change under Paragraph 12.1 causes an increase or decrease in the Contractor's cost or the time required for the performance of any part of the Work under the Contract, including Work not affected directly by the change, an equitable adjustment shall be processed and approved following the provisions of Division 1, Section 01311, Project Schedule for any adjustment to time. Adjustments to Contract Sum shall be determined in one or more of the following ways:

12.2.1.1 By mutual acceptance of a lump sum price properly itemized in accordance with Subparagraph 12.2.2 and supported by sufficient data to permit evaluation;

12.2.1.2 In the event that unit prices are included in the bid and accepted by the Owner, payment for the Work performed shall be at the unit price amount for each item of Work accepted by the Owner and conforming to the contract requirements. Such prices shall be additive and deductive and include all costs necessary to complete the Work, inclusive of overhead costs and profit.

12.2.1.3 If prior to the commencement of the Work the Contractor has not provided a lump sum price, or the Contractor and the Owner have not agreed on a lump sum price as described in Subparagraph 12.2.1.1 above, the price shall be established in one of the following ways, as determined by the Project Manager;

1. on a lump sum basis following completion of the Work. The lump sum price shall be properly itemized in accordance with Subparagraph 12.2.2. and supported by sufficient data to permit evaluation;

2. on a time and materials basis, with or without a maximum not-to-exceed price, at the discretion of the Project Manager. Costs will be accumulated on a time and materials basis as described in Subparagraph 12.2.3 and presented daily (the day after the Work is performed) for approval by the Owner on the forms provided by the Owner. The daily report will be signed by the Contractor and the Owner.

12.2.2 For Work proceeding on a lump sum basis. In accordance with Subparagraph 12.2.1.1 or 12.2.1.3.1, the Contractor shall provide a detailed breakdown of the costs as described herein and submit the costs and substantiating data in a proposal to the Owner:

12.2.2.1 Direct Costs: Direct costs shall be limited to the following: cost of materials, including sales tax and cost of delivery to the project; cost of labor (from apprentice level up through and including the general foreman classification) comprising of the base wage plus fringe benefits, including burden (Social Security, Worker's Compensation, and Unemployment Insurance, etc.); rental rate including fuel and maintenance for any power tools valued at over \$3,000 and equipment as described below, under "Equipment Rates;" bond premiums and additional cost of Builder's Risk Insurance, at rates equal to the amount billed for the base contract or the actual rate as supported by an invoice.

12.2.2.1.1 Equipment Rates: For any machinery or special equipment (other than small tools) which has been authorized by the Project Manager, the Contractor shall receive the rental rates in the current edition and appropriate volume of the "Rental Rate Blue Book for Construction Equipment," published by K-III Directory

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Corp., 10 Lake Drive, Highstown, NJ 08520-5397.

Hourly rental rates shall be determined as follows. The established hourly rental rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 176, and multiplied by the area adjustment factor, plus the estimated hourly operating costs. The adjusted monthly rate is that resulting from application of the rate adjustment formula in order to eliminate replacement cost allowances in machine depreciation and contingency cost allowances. Attachments shall not be included unless required for the time and materials Work. For equipment not listed in the Blue Book, the Contractor shall receive a rental rate as agreed upon before such Work is begun. If agreement cannot be reached, the Owner reserves the right to establish a rate based on similar equipment in the Blue Book or prevailing commercial rates in the area. These rates shall apply for equipment used during the Contractor's regular shift of 10 hours per day. Where the equipment is used more than 10 hours per day, either on the Contractor's normal Work or on time and materials, and either on single or multiple shifts, an overtime rate, computed as follows, shall apply: The hourly overtime rate shall be equal to the adjusted monthly rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 352, and multiplied by the area adjustment factor, plus the estimated hourly operating cost.

12.2.2.1.2 Equipment which must be rented or leased specifically for Work required under this section shall be authorized in writing by the Project Manager.

12.2.2.1.3 When it is necessary to obtain equipment from sources beyond the project limits exclusively for time and materials Work, the actual cost of transferring the equipment to the site of the Work and return will be allowed as an additional item of expense. Where the move is made by common carrier, the move-in allowance will be limited to the amount of the freight bill or invoice. If the Contractor hauls the equipment with his own forces, the allowance will be limited to the rental rate for the hauling unit plus operator wages. In the event that the equipment is transferred under its own power, the moving allowance will be limited to one-half of the normal hourly rental rate plus operator's wages. In the event that the move-out is to a different location, payment will in no instance exceed the amount of the move-in. Move-in allowance shall not be made for equipment brought to the project for time and materials Work which is subsequently retained on the project and utilized for completion of contract items, camp maintenance, or related Work.

12.2.2.1.4 Equipment ordered to be on stand-by basis shall be paid for at the stand-by rental rate for the number of hours in the Contractor's normal Work shift, but not to exceed 8 hours per day. The stand-by rental rate shall be computed as follows:

The hourly stand-by rate shall be equal to the adjusted monthly

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rate for the basic equipment plus the adjusted monthly rate for applicable attachments, both divided by 352, all multiplied by the area adjustment factor.

Time will be recorded to the nearest one-half hour for purposes of computing compensation to the Contractor for equipment utilized under these rates.

The equipment Direct Cost determination covers all costs for providing required equipment and no additional compensation will be made for other costs such as, but not limited to, fuels, lubricants, replacement parts or maintenance costs. Cost of repairs, both major and minor as well as charges for mechanic's time utilized in servicing equipment to ready it for use prior to moving to the project and similar charges will not be allowed.

12.2.2.2 Overhead: Overhead shall include the following: the Contractor's management staff; supervision; superintendence; wages of timekeepers; watchmen and clerks; small tools; incidentals; costs of preparing and responding to Request for Proposals, including estimating; schedule revisions, software costs and clerical expenses; general home and field office expenses; including any financial/financing costs; legal costs; and/or accounting costs; temporary facilities; temporary utilities (power, water, sewer, telephone, etc.) And any utilities used by the Contractor during the construction period; and all other expenses not specifically defined in Subparagraph 12.2.2.1 as direct costs. Unless specifically required or requested, any travel and associated costs from outside of the Municipality of Anchorage is considered as part of the Contractor's project overhead and will not be paid by the Owner.

12.2.2.3 The Contractor shall apply a combined percentage rate to the direct costs to compensate it for additional Overhead and Profit associated with the change. The combined rate to the Owner of any change shall not exceed the rates set forth in the following schedule:

For the Contractor, for Work performed by his own forces, up to fifteen percent (15%) of direct costs;

For each Subcontractor involved, for Work performed by the Subcontractor's forces, up to fifteen percent (15%) of direct costs;

For the Contractor, for Work performed by Subcontractors, up to ten percent (10%) of the Subcontractor's direct costs;

For the Subcontractor, for Work performed by the multiple-tier-contractors up to ten percent (10%) of direct costs;

The total Contractor and all-subcontractors overhead allowance shall not exceed twenty-five percent (25%) of direct costs.

12.2.3 For Work proceeding on a time and material basis in accordance with Subparagraph 12.2.1.3.2, the Contractor shall be compensated for its costs in accordance with the following:

12.2.3.1 Direct Costs: Direct Costs shall be as defined in Subparagraph 12.2.2.1.

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- 12.2.3.2 Overhead: Overhead shall be as defined in Subparagraph 12.2.2.2.
- 12.2.3.3 Overhead and Profit combined included in the total costs to the Owner of any change shall not exceed the rates set forth in the following schedule:
- For the Contractor, for Work performed by his own forces, up to ten percent (10%) of direct costs;
- For each Subcontractor involved, for Work performed by the Subcontractor's forces, up to ten percent (10%) of direct costs;
- For the Contractor, for Work performed by Subcontractors, up to five percent (5%) of the Subcontractor's direct cost.
- For the Subcontractor, for Work performed by multiple-tier-contractors up to five percent (5%) of direct costs;
- The total Contractor and multiple-tier-contractor overhead allowances shall not exceed twenty percent (20%) of direct costs.
- 12.2.4 If the net value of a change results in a credit from the Contractor, Subcontractor, or Material Suppliers or Vendors, the credit given shall be the net cost without overhead or profit. The costs as used herein shall include all items of labor, materials, plant and equipment. Credit changes shall include a percentage of the direct costs for overhead and profit at fifty percent (50%) of the rates defined in Subparagraph 12.2.2.3.
- 12.2.5 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if the quantities originally contemplated are so changed in the proposed Change Order that application of the agreed unit prices to the quantities of Work proposed will cause substantial inequity to the Owner or the Contractor, the applicable unit prices shall be equitably adjusted.
- 12.2.6 The Contract Sum, the Contract Time, and the date required for performance of any part of the Work may be changed only by a Change Order to the Contract. Each Change Order will be identified at the bottom of each approved RFP, with a heading of "Change Order Authorization." Change Orders executed pursuant to this article constitute full and final settlement of all aspects of cost and time related to and/or occasioned by the Work (or event) described therein. Costs are defined to include all direct labor costs; all direct materials and equipment expenses; any and all overhead, profit, and commission; any and all impact costs related to and/or occasioned by the Work described herein; as well as all taxes and insurance. All Change Orders shall be approved by the Project Manager and signed by the Owner and Contractor.
- 12.2.7 For accounting purposes, the Change Orders identified in Subparagraph 12.2.6 will be accumulated on a monthly basis or more frequently and summarized in a Summary Change Order. The Summary Change Order shall be approved by the Project Manager and signed by the Owner and Contractor. No claim by the Contractor for or on account of any Change Order shall be due nor shall any such claim appear on an Application for Payment or demand for final payment until the Summary Change Order has been fully executed by the Contractor and the Owner.
- 12.2.8 The Superintendent of Schools and/or the Senior Director of Capital Planning and Construction are authorized to make contract modifications or to execute orders up to one hundred thousand dollars (\$100,000) that are within the project's budget. The Superintendent is authorized to make contract modifications in excess of one hundred

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thousand dollars (\$100,000) but not-to-exceed two hundred fifty thousand dollars (\$250,000) that are within the project's budget. All contract modifications or change orders above two hundred fifty thousand dollars (\$250,000) shall be recommended by the Superintendent to the School Board for its approval.

12.2.9 No claim by the Contractor for an equitable adjustment hereunder shall be allowed if asserted after final payment or more than six months after the date of substantial completion, whichever is earlier.

12.2.10 Nothing in this Article shall excuse the Contractor from proceeding with the Contract as changed.

12.3 DIFFERING CONDITIONS

12.3.1 The Contractor shall promptly, and before the conditions are disturbed, give written notice to the Owner of (1) subsurface or latent physical conditions at the site which differ materially from those indicated in this Contract, or (2) unknown physical conditions at the site, of an unusual nature, which differ materially from those ordinarily encountered and generally recognized as inherent in Work of the character provided for in the Contract.

12.3.2 The Owner shall investigate the site conditions promptly after receiving notice. Work shall not proceed at the affected site, except at the Contractor's risk, until the Owner has provided written instructions to the Contractor. If the conditions do materially so differ and cause an increase or decrease in the Contractor's cost of, or the time required for, performing any part of the Work under this Contract, whether or not changed as a result of the conditions, an adjustment shall be made under this Article and the Contract modified in writing accordingly.

12.3.3 No request by the Contractor for an adjustment to the Contract under this Article shall be allowed unless the Contractor has given the written notice required.

12.3.4 No claim by the Contractor for an adjustment hereunder shall be allowed if asserted after final payment or more than six months after the date of substantial completion, whichever is earlier.

12.4 CLAIMS FOR ADDITIONAL COST OR TIME

12.4.1 If the Contractor claims that additional cost is involved because of, but not limited to (1) any written interpretation pursuant to Subparagraph 2.2.8; (2) any order by the Owner to stop the Work pursuant to Paragraph 3.4 where the Contractor was not at fault; or (3) any other impacts related to the Work, the Contractor shall make such claim as provided in Subparagraph 12.4.2.

12.4.2 If the Contractor wishes to make a claim for an increase in the Contract Sum, and such claim is not barred under Paragraph 8.3, he shall deliver to the Project Manager written notice thereof within fourteen (14) days after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the Work, except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Paragraph 10.3. No such claim shall be valid unless so made. The written notice shall state:

12.4.2.1 the date, nature and circumstances of the conduct regarded as a change;

12.4.2.2 the name, function and activity of each Contractor official, agent or employee involved in or knowledgeable about such conduct;

- 12.4.2.3 the identification of any documents and the substance of any communication involved in such conduct;
  - 12.4.2.4 in the instance of alleged acceleration of scheduled performance or delivery, the basis upon which it arose;
  - 12.4.2.5 the particular elements of Contract performance for which the Contractor may seek an equitable adjustment under this Paragraph, including:
    - 12.4.2.5.1 what Contract Drawings or Specification have been or may be affected by the alleged change;
    - 12.4.2.5.2 what labor or materials or both have been or may be added, deleted or wasted by the alleged change;
    - 12.4.2.5.3 to the extent practicable, what delay and disruption in the manner and sequence of performance and effect on continued performances have been or may be caused by the alleged change in accordance with Division 1, Section 01311, "Project Schedule;"
    - 12.4.2.5.4 what adjustments to the Contract Sum and other provisions of the Contract affected by the alleged change are estimated; and
  - 12.4.2.6 the Contractor's estimate of the time by which the Project Manager and Architect must respond to the Contractor's notice to minimize cost, delay or disruption of performance in accordance with Division 1, Section 01311, "Project Schedule."
- 12.4.3. After receipt of a Contractor's claim, the Project Manager may visit the site, schedule an informal review hearing, or request additional information in order to fully evaluate the issues of the claim. The Project Manager has thirty (30) calendar days to review the claim and to send a written decision to the Contractor. If the Project Manager agrees with the Contractor that the issues presented in the Contractor's claim justify a change in the Contract Sum or the Contract Time, the Project Manager and the Contractor shall negotiate the amount of the adjustment in the Contract.

If the Project Manager determines that the claim does not justify a change in the Contract Sum or Contract Time, or if the Project Manager cannot reach agreement with the Contractor on the amount of the adjustment in the Contract Sum or Contract Time, the amount shall be determined in accordance with Paragraph 12.5

- 12.4.4 In no event shall the Contractor slow or stop the Work while such determination is pending and the Owner shall continue to make payment in accordance with the Contract Documents except as to the amount in dispute. Any change in the Contract Sum resulting from such claim shall be authorized by Change Order.

## 12.5 RESOLUTION OF DISPUTED CLAIMS

- 12.5.1 All disputed claims arising from this contract shall be resolved according to the process identified in this section 12.5. This includes any interpretations of the contract documents, claims for increase in the Contract Sum or Contract Time, or any other issues of equitable adjustment.
- 12.5.2 Disputes between the Owner and the Contractor will be processed through the appeal

process described in 12.5.3 and/or through the use of Alternative Dispute Resolution (ADR) procedures described in 12.5.4.

12.5.3 Appeal Process

- 12.5.3.1 If the Contractor does not agree with the decision of the Project Manager, the Contractor may, within ten (10) calendar days of receipt of the decision, file a notice of appeal with the Chief Operating Officer. The Chief Operating Officer will then have sixty (60) calendar days to review the appeal and send a written decision to the Contractor.
- 12.5.3.2 If the Contractor does not agree with the final decision rendered by the Chief Operating Officer, it may pursue litigation.

12.5.4 ADR Process

- 12.5.4.1 Either the Owner or the Contractor may request, prior to litigation, that a dispute be submitted to mandatory mediation.
  - 12.5.4.2 The parties shall jointly select and compensate a third party mediator.
  - 12.5.4.3 Both parties shall attend joint mediation sessions and make a good faith effort to reach agreement through this process.
  - 12.5.4.4 There is no obligation for either of the parties to accept any agreement during the mediation process.
- 12.5.5 The Contractor shall diligently carry on the Work and maintain the progress schedule during any dispute resolution proceedings, unless otherwise agreed in writing.

END OF ARTICLE 12

ARTICLE 13

UNCOVERING AND CORRECTION OF WORK

13.1 UNCOVERING OF WORK

13.1.1 If any portion of the Work should be covered contrary to the request of the Owner, Project Manager or the Architect or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Project Manager, be uncovered for his observation and shall be replaced at the Contractor's expense.

13.1.2 If any other portion of the Work has been covered which the Architect or the Project Manager has not specifically requested to observe prior to being covered, either may request to see such Work and it shall be uncovered by the Contractor. If such Work be found in accordance with the Contract Documents, the cost of uncovering and replacement shall, by appropriate Change Order, be charged to the Owner. If such work be found not in accordance with the Contract Documents, the Contractor shall pay such costs unless it be found that this condition was caused by the Owner or a separate contractor as provided in Article 6, in which event the Owner shall be responsible for the payment of such costs.

13.2 CORRECTION OF WORK

13.2.1 The Contractor shall promptly correct all Work rejected by the Project Manager as defective or as failing to conform to the Contract Documents whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including additional Owner Administrative and legal expenses, and additional compensation for the Architect's and/or Project Manager's additional services made necessary thereby.

13.2.2 If, within one (1) year after the Date of Substantial Completion of the Work or designated portion thereof or within such longer period of time as may be prescribed by law or by the terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner through the Project Manager to do so unless the Owner through the Project Manager has previously given the Contractor a written acceptance of such condition. This obligation shall survive the provisions of Subparagraph 9.5.5 and termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

13.2.3 The Contractor, unless removal is waived by the Owner, shall remove from the site all portions of the Work which are defective or non-conforming, or if permitted or required, he shall correct such Work in place by and at the expense of the Contractor promptly after receipt of notice, and such rejected Work shall not thereafter be tendered for acceptance unless the former rejection or requirement for correction is disclosed.

13.2.4 If the Contractor does not proceed with the correction of such defective or non-conforming Work within a reasonable time fixed by written notice from the Owner, through the Project Manager, the Owner may either:

13.2.4.1 by separate contract or otherwise replace or correct such Work and charge the Contractor the cost occasioned the Owner thereby and remove and store the materials or equipment at the expense of the Contractor, or

13.2.4.2 terminate this Contract for default as provided in Paragraph 14.1. If the Contractor does not pay the cost of such replacement or correction and the

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removal and storage within ten (10) days thereafter, the Owner may upon ten (10) additional days' written notice sell such Work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the costs that should have been borne by the Contractor, including compensation for the Owner's administrative and legal expenses, and additional services of the Architect and the Project Manager made necessary thereby. If such proceeds of sale do not cover all costs which the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

13.2.5 The Contractor shall bear the cost of making good all Work of the Owner or separate contractors destroyed or damaged by such correction or removal.

13.2.6 Nothing contained in this Paragraph 13.2 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including Paragraph 4.5. thereof. The establishment of the time period of one (1) year after the date of Substantial Completion or such longer period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which his obligation to comply with the Contract documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to his obligations other than specifically to correct the Work.

13.3 ACCEPTANCE OF DEFECTIVE OR NONCONFORMING WORK

13.3.1 If the Owner prefers to accept defective or nonconforming Work, he may do so instead of requiring its removal and correction, in which case a Change Order will be issued to reflect a reduction in the Contract Sum where appropriate and equitable, or the Owner may elect to accept payment in materials or services, in lieu of a reduction in the Contract Sum. If the amount of a reduction is determined after final payment, it shall be paid to the Owner directly by the Contractor.

END OF ARTICLE 13

ARTICLE 14

TERMINATION OF THE CONTRACT

14.1 TERMINATION BY THE OWNER

14.1.1 If the Contractor:

- 14.1.1.1 is adjudged bankrupt; or
- 14.1.1.2 makes a general assignment for the benefit of his creditors; or
- 14.1.1.3 has a receiver appointed on account of his insolvency; or
- 14.1.1.4 if he refuses or fails to commence the Work within the time required by this Contract; or
- 14.1.1.5 refuses or fails to prosecute the Work or any separable part with the diligence that will ensure its completion within the time specified in this Contract, including any extension; or
- 14.1.1.6 refuses or fails to provide sufficient and properly skilled workmen or proper materials or equipment to complete the Work in an acceptable manner and without delay; or
- 14.1.1.7 refuses or fails to complete the Work in accordance with the Project Schedule Milestone Dates set forth under Section 00200 hereof; or
- 14.1.1.8 fails to make prompt payment to Subcontractors or for materials or labor, or
- 14.1.1.9 persistently disregards laws, ordinances, rules, regulations, or orders of any public authority having jurisdiction; or
- 14.1.1.10 fails or refuses to comply with the requirements of Division 1, Section 01311, "Project Schedule" of the Contract Documents; or
- 14.1.1.11 otherwise is guilty of a substantial violation of a provision of the Contract Documents,

then the Owner, may, without prejudice to any right or remedy and after giving the Contractor and his surety, if any, seven (7) days' written notice, terminate the employment of the Contractor and take possession of the site and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor and may finish the Work by whatever method he may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the Work is finished. Such an event of termination shall at the option of the Owner result in the automatic assignment to the Owner of all of the Contractor's subcontracts, and the Owner may thereafter enforce such subcontracts in the prosecution of the Work in the same manner and to the same extent as the Contractor.

- 14.1.2 If the cost of finishing the Work exceeds the unpaid portion of the Contract Sum, the Contractor or his assigns, heirs or sureties shall pay the difference to the Owner. This obligation shall survive the termination of the Contract.

14.1.3 Nothing contained in this Article 14 shall impair any of the obligations of the surety.

## 14.2 TERMINATION FOR CONVENIENCE

14.2.1 The performance of the Work under this Contract may be terminated by the Owner in whole, or from time to time in part, whenever the Owner shall determine that such termination is in the best interest of the Owner. Any such termination shall be effected by delivery to the Contractor of a Notice of Termination specifying the extent to which performance of Work under the Contract is terminated, and the date upon which such termination becomes effective.

14.2.2 After receipt of a Notice of Termination, and except as otherwise directed by the Owner, the Contractor shall:

14.2.2.1 stop Work under the Contract on the date and to the extent specified in the Notice of Termination;

14.2.2.2 place no further orders or subcontracts for materials, services or equipment, except as may be necessary for completion of such portion of this Work under the Contract as is not terminated;

14.2.2.3 terminate all orders and subcontractors to the extent that they relate to the performance of Work terminated by the Notice of Termination;

14.2.2.4 assign to the Owner, in the manner, at the times, and to the extent directed by the Owner, all of the right, title, and interest of the Contractor under the orders and subcontracts so terminated, in which case the Owner shall have the right, in its discretion, to settle or pay any or all claims arising out of the termination of such orders and subcontracts;

14.2.2.5 settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, with the approval or ratification of the Owner, to the extent he may require, which approval or ratification shall be final for all the purposes of this clause;

14.2.2.6 transfer title and deliver to the Owner, in the manner, at the times, and to the extent, if any, directed by the Owner, (A) the fabricated or unfabricated parts, Work in process, completed Work, supplies, and other material produced as a part of, or acquired in connection with the performance of, the Work terminated by the Notice of Termination, and (B) the completed or partially completed plans, drawings, information, and the property which, if the Contract has been completed, would have been required to be furnished to the Owner;

14.2.2.7 use his best efforts to sell, in the manner, at the time, to the extent and at the price or prices directed or authorized by the Owner, any property of the types referred to in Subparagraph 14.2.2.6 above, provided, however, that the Contractor (A) shall not be required to extend credit to any purchase, and (B) may acquire any such property under the conditions prescribed by and at a price or prices approved by the Owner, and provided further, that the proceeds of any such transfer or disposition shall be applied in reduction of any payments to be made by the Owner to the Contractor under this Contract or shall otherwise be credited to the price or cost of the Work covered by this Contract or paid in such other manner as the Owner may direct;

14.2.2.8 complete performance of such part of the Work as shall not have been

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terminated by the Notice of Termination and may incur obligations as are necessary to do so; and

- 14.2.2.9 take such action as may be necessary, or as the Owner may direct, for the protection and preservation of the property related to this Contract which is in the possession of the Contractor and in which the Owner has or may acquire an interest.
- 14.2.3 The Contractor may submit to the Owner a list, certified as to quantity and quality, of any or all items of termination inventory not previously disposed of, exclusive of items the disposition of which has been directed or authorized by the Owner, and may request the Owner to remove such items or enter into a storage agreement covering them. Not later than fifteen (15) days thereafter, the Owner will accept title to such items and remove them or enter into a storage agreement covering the same; provided that the list submitted shall be subject to verification by the Owner upon removal of all items, or if the items are stored within forty-five (45) days from the date of submission of the list, and any necessary adjustment to correct the list as submitted shall be made prior to final settlement.
- 14.2.4 After receipt of a Notice of Termination, the Contractor shall submit to the Owner his termination claim, in the form and with certification prescribed by the Owner. Such claim shall be submitted promptly but in no event later than six (6) months from the effective date of termination. Upon failure of the Contractor to submit his termination claim within the time allowed, the Owner may determine on the basis of information available to him, the amount, if any, due to the Contractor by reason of the termination and shall thereupon pay to the Contractor the amount so determined.
- 14.2.5 Subject to the provisions of Subparagraph 14.2.4 above, the Contractor and the Owner may agree upon the whole or any part of the amount or amounts to be paid to the Contractor by reason of the total or partial termination of Work pursuant to this paragraph, which amount or amounts may include a reasonable allowance of profit on Work done; provided that such agreed amount or amounts, exclusive of settlement costs, shall not exceed the total Contract Sum as reduced by the amount of payments otherwise made and as further reduced by the Contract Sum attributable to that portion of Work not terminated. The Contract shall be amended accordingly, and the Contractor shall be paid the agreed amount. Nothing in Subparagraph 14.2.6 below, prescribing the amount to be paid to the Contractor in the event of failure of the Contractor and the Owner to agree upon the whole amount to be paid to the Contractor by reason of the termination of Work pursuant to this clause, shall be deemed to limit, restrict, or otherwise determine or affect the amount or amounts which may be agreed upon to be paid to the Contractor pursuant to this Subparagraph 14.2.5.
- 14.2.6 In the event of the failure of the Contractor and the Owner to agree, as provided in Subparagraph 14.2.5 above, upon the whole amount to be paid to the Contractor by reason of the termination of Work pursuant to this paragraph, the Owner shall pay to the Contractor the amounts determined by the Owner as follows, but without duplication of any amounts agreed upon in accordance with Subparagraph 14.2.5:
  - 14.2.6.1 with respect to all Contract Work performed prior to the effective date of the Notice of Termination, the total (without duplication of any items) of:
    - 14.2.6.1.1 the cost of such Work;
    - 14.2.6.1.2 the cost of settling and paying claims arising out of the termination of Work under subcontracts or orders as provided in Subparagraph 14.2.2.5 above exclusive of the amounts paid or

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payable on account of supplies or materials delivered or services furnished by the Subcontractor prior to the effective date of the Notice of Termination Work under this Contract, which amounts shall be included in the cost on account of which payment is made under Subparagraph 14.2.6.1 above; and

- 14.2.6.1.3 a sum as profit on Subparagraph 14.2.6.1.1 above, determined by the Owner to be fair and reasonable; and
- 14.2.6.2 the reasonable cost incidental to termination of Work including:
  - 14.2.6.2.1 accounting, legal, clerical and other expenses reasonably necessary for the preparation of termination settlement proposals and supporting data;
  - 14.2.6.2.2 the termination and settlement of subcontracts (excluding the amounts of such settlements); and storage, transportation and other costs incurred (pursuant to Subparagraph 14.2.2.9), reasonably necessary for the preservation, protection or disposition of the termination inventory.
- 14.2.6.3 The total sum to be paid to the Contractor under Subparagraph 14.2.6.1 above shall not exceed the total Contract Sum as reduced by the portion of the Contract Sum attributable to that portion of Work not terminated. Except for normal spoilage, and except to the extent that the Owner shall have otherwise expressly assumed the risk of loss, there shall be excluded from the amounts payable to the Contractor under Subparagraph 14.2.6.1, the fair value, as determined by the Owner, of property which is destroyed or lost, stolen, or damaged so as to become undeliverable to the Owner, or to a buyer pursuant to Subparagraph 14.2.2.7.
- 14.2.7 In arriving at the amount due the Contractor under this paragraph, there shall be deducted (1) all unliquidated advance or other payments on account theretofore made to the Contractor, applicable to the terminated portion of this Contract, (2) any claim which the Owner may have against the Contractor in connection with this Contract, and (3) the agreed price for, or the proceeds of sale of, any materials, supplies or other things acquired by the Contractor or sold, pursuant to the provisions of this paragraph and not otherwise recovered by or credited to the Owner.
- 14.2.8 If the termination hereunder be partial, the Contractor may file with the Owner a claim for an equitable adjustment of the price or prices specified in the Contract relating to the continued portion of the Contract (the portion not terminated by the Notice of Termination), and such equitable adjustment as may be agreed upon shall be made in such price or prices. Any claim by the Contractor for an equitable adjustment under this clause must be asserted within ninety (90) days from the effective date of the termination.
- 14.2.9 The Owner may from time to time, under such terms and conditions as it may prescribe, make partial payments and payments on account against costs incurred by the Contractor in connection with the terminated portion of this Contract whenever in the opinion of the Owner the aggregate of such payments shall be within the amount to which the Contractor will be entitled hereunder. If the total of such payments is in excess of the amount finally agreed or determined to be due under this paragraph, such excess shall be payable by the Contractor to the Owner upon demand, together with interest computed at the legal prevailing rate, for the period from the date such excess payment is received by the Contractor to the date on which such excess is repaid to the Owner, provided, however,

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that no interest shall be charged with respect to any such excess payment, attributable to a reduction in the Contractor's claim by reason of retention or other disposition of termination inventory until ten (10) days after the date of such retention or disposition, or such later date as determined by the Owner by reason of the circumstances.

- 14.2.10 Unless otherwise provided for in this Contract, or by applicable statute, the Contractor shall - from the effective date of termination until the expiration of three (3) years after final settlement under this Contract - preserve and make available to the Owner at all reasonable times at the office of the Contractor but without direct charge to the Owner, all his books, records, documents and other evidence bearing on the costs and expenses of the Contractor under this Contract and relating to the Work terminated hereunder, or, to the extent approved by the Project Manager, photographs, microphotographs, or other authentic reproductions thereof.

END OF ARTICLE 14

END OF SECTION

SUPPLEMENTARY GENERAL CONDITIONS TO THE CONTRACT FOR CONSTRUCTION

REFERENCE:

1. **GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION ANCHORAGE SCHOOL DISTRICT, ANCHORAGE, ALASKA**, constitutes the General Conditions of this Contract, and is further revised and supplemented by the provisions of these Supplementary General Conditions. The General Conditions and the Supplementary General Conditions are applicable to all of the work under this Contract and shall apply to the Contractor and all Subcontractors, Sub-subcontractors, and Material Suppliers and Vendors.

SUPPLEMENTS:

1. The following supplements modify, change, delete, or add to the General Conditions. Where any article of the General Conditions is modified or any paragraph deleted, subparagraph or clause thereof is modified, or deleted by these supplements, the unaltered provisions of such article, paragraph, sub-paragraph or clause shall remain in effect.

ARTICLE 4

**Add the following new Paragraphs 4.7.1.2 & 4.7.1.3:**

- 4.7.1.2 Unless otherwise authorized by the Project Manager, successfully obtaining the necessary permits shall be the responsibility of the Contractor and shall constitute a requirement for the issuance of the Notice to Proceed by the Owner.
- 4.7.1.3 Contractor shall submit Fire Alarm shop drawings to the Municipality of Anchorage Building Safety Office.
- 4.7.1.3.1 Contractor shall pay for the Municipality of Anchorage Fire Alarm permits.
- 4.7.1.3.2 Contractor shall obtain the permits upon approval.

**Add the following new Paragraph 4.21, Construction Management Software:**

4.21 CONSTRUCTION MANAGEMENT SOFTWARE

- 4.21.1 The Contractor shall fully utilize the Owner provided construction management software, currently Sage Procore Construction Management for communications, Submittals, Requests for Information, for submission of construction record documents and photographs, and other purposes as directed by the Project Manager.
- 4.21.2 The contractor shall designate a minimum of two (2) people from their internal project staff to access the Construction Management Software. It is incumbent upon the Contractor to ensure these individuals familiarize themselves and become proficient in the use of the Construction Management software utilizing the manuals, help files, training videos, forums and other support services provided by the Construction Management Software.

ARTICLE 7

**Add the following new Paragraph 7.12, Fire Alarm System:**

7.12 FIRE ALARM SYSTEM

- 7.12.1 Before beginning any work that may result in a fire alarm transmission, the contractor shall call both the Anchorage Fire Department dispatcher at 522-1122 and the local fire station which would respond to an alarm and let them know you will be working on the system and for approximately how long. Second the contractor shall call Guardian Security at 277-1975 and notify the dispatcher that you have called the Fire Department, what type of work you are planning to do, and approximately how long before you expect to be completed. After the contractor is completed with your work, you must reverse the process by notifying the Fire Department dispatcher and the ASD Dispatcher that you are finished.
- 7.12.2 The Contractor shall be held responsible for all charges incurred from false fire alarms. Currently the Anchorage Fire Department charges seven hundred fifty dollars and no cents (\$750.00) per false alarm, or current rate charged.

**Add the following new Paragraph 7.13, Apprenticeship Utilization Requirements for Contracts:**

7.13 APPRENTICESHIP UTILIZATION REQUIREMENTS FOR CONTRACTS

- 7.13.1 Once awarded a contract by ASD, the prime contractor will be responsible to gather and submit all documentation to ASD to confirm compliance with the Apprenticeship Utilization Policy ("AUP") mandated by Anchorage School Board Policy 3311.1.2. The Prime contractor will provide documentation to ASD to confirm that 15% of the labor hours worked in trades/crafts categories that are included in the Alaskan Federally Registered Apprenticeship Program has been executed by certified apprentices enrolled in those programs, and will provide documentation to confirm that the apprentices listed on the documentation submitted are currently in good standing with their Alaskan Federally Registered Apprenticeship Program. ASD will provide several forms which the prime contractor will be required to fill out in addition to submitting their certified payroll documents. Also, ASD will audit the prime contractor's documentation on the following schedule. Audits for projects will be conducted every 30 days. In addition, ASD will conduct on-site audit at non-scheduled intervals to ensure that the apprentices listed on the written documentation are physically on-site. ASD will give a reasonable notice of 24 hours prior to on-site inspections.
- 7.13.2 The prime contractor will be required to submit the following, at the intervals requested by ASD:
- Certified Payroll for prime and subcontractors.
  - Apprenticeship Utilization Form for prime and subcontractors.
  - Apprenticeship Utilization Calculation form for prime and subcontractors, which demonstrates labor hours worked by apprentices in applicable crafts/trades categories, and reports status as to whether the apprentices listed are in good standing with their Alaskan Federally Registered Apprenticeship Program.

ARTICLE 9

**Add the following new Paragraph 9.12, Liquidated Damages:**

9.12 LIQUIDATED DAMAGES

- 9.12.1 Should the Contractor fail to substantially complete the Work on or before any date stipulated for Substantial Completion (or such later date as may result from extension of time granted by the Owner), he shall pay the Owner, as liquidated damages, the sum of one thousand dollars and no cents (\$1,000.00) for each consecutive calendar day that terms of the contract remain unfulfilled beyond the date allowed by the Contract, which sum is agreed upon as a reasonable and proper measure of damages which the Owner will sustain per day by failure of the Contractor to complete work within time as stipulated; it being recognized by the Owner and to the Contractor that the injury to the Owner which could result from a failure of the Contractor to complete on schedule is uncertain and cannot be computed exactly. In no way shall costs for liquidated damages be construed as a penalty on the Contractor.
- 9.12.2 For each consecutive calendar day that the Work remains incomplete after the date established for Final Completion, the Owner will retain from the compensation otherwise to be paid to the Contractor the sum of one thousand dollars and no cents (\$1,000.00). This amount is the minimum measure of damages the Owner will sustain by failure of the Contractor to complete all remedial work, correct deficient work, clean up the project and miscellaneous tasks as required to complete all work specified.
- 9.12.3 In no instance shall more than one thousand dollars and no cents (\$1,000.00) a day are assessed for liquidated damages for work, which remains incomplete.

ARTICLE 10

**Add the following new Paragraph 10.4, Compliance:**

10.4 COMPLIANCE

- 10.4.1 When the school is in session the Contractor will be restricted to the areas, which do not interfere with school operations. These areas shall be safety and security fenced to not impact school operations. Additional areas may be utilized upon concurrence of the Project Manager. The Contractor shall minimize his impact on education while his work is in progress. Workers must stay out of school while school is in session. All renovation work in the existing school, including sprinklers, must be performed while school is not in session. If scheduling pushes this work into the school session, then the work must be performed on nights and weekends.
- 10.4.2 The Contractor must maintain interior building fire exits through the construction areas and maintain these exits during all school operation hours. These exit routes may not be modified without concurrence of the Project Manager and the School Principal.

ARTICLE 11

**Remove and replace Section 11.3.3.1 with the following:**

- 11.3.3.1 The Contractor shall maintain an umbrella liability policy according to the following:
- Projects < \$2 million construction cost - \$1,000,000 per occurrence and annual aggregate.

Projects < \$10 million construction cost – \$5,000,000 per occurrence and annual aggregate.

Projects > \$10 million construction cost – \$10,000,000 per occurrence and annual aggregate.

This requirement does not apply to Subcontractors.

ARTICLE 12

**Article 12, 12.5.2: Delete this section in its entirety and replace with the following:**

Disputes between the Owner and the Contractor will be processed through the appeal process described in 12.5.3.

**Article 12, 12.5.3: Delete this section in its entirety and replace with the following:**

12.5.3 Appeal Process

12.5.3.1 The contractor will submit in writing the issue(s) being claimed and the Project Manager will review. The Project Manager may visit the site, schedule a review hearing, or request additional information in order to fully evaluate the issues of the claim. The Project Manager will send the written decision to the Contractor within ten (10) days of receipt of claim.

12.5.3.2 If the Contractor does not agree with the decision of the Project Manager, within ten (10) days from the receipt of the written decision by the Project Manager, the Contractor may request an appeal of the decision to the Senior Director of Capital Planning & Construction. The Senior Director of Capital Planning & Construction will then have ten (10) days to review the issue(s) and send a written decision to the Contractor.

12.5.3.3 If the Contractor does not agree with the decision of the Senior Director of Capital Planning & Construction, within ten (10) days from the receipt of the written decision by the Senior Director of Capital Planning & Construction, the Contractor may request an appeal of the decision to the Chief Operating Officer. The Chief Operating Officer will then have ten (10) days to review the issue(s) and send a written decision to the Contractor.

12.5.3.4 If the Contractor does not agree with the final decision rendered by the Chief Operating Officer, it may pursue litigation.

12.5.3.5 The Contractor may bring no action on claims unless the claims have been properly raised in accordance with all notice provisions of the conditions and considered in the above dispute-resolution procedures.

12.5.3.6 The Contractor shall diligently carry on the Work and maintain the progress schedule during any dispute-resolution proceedings, unless otherwise agreed in writing.

- 12.5.3.7 Any step in the process identified above can be waived only by explicit written waiver by both parties.

**Article 12, 12.5.4: Delete this section in its entirety.**

END OF SECTION



WAGE RATES

I. GENERAL

A. STATE OF ALASKA PREVAILING WAGE SCALE AND ALASKA HIRE

Attention of bidders is particularly called to the requirements as to conditions of employment to be observed and minimum wage rates to be paid under the Contract. Among other things, the requirements of Alaska's Little Davis Bacon Act (AS 36.05.010) are applicable to this project. Each bidder must inform himself/herself fully of the conditions relating to the construction of the project and the employment of labor thereon. Failure to do so will not relieve a successful bidder of his/her obligation to furnish all material and labor necessary to carry out the provisions of the Contract.

State Labor Wage and Hour Administration Pamphlets No. 600 for Laborers' and Mechanics' are updated on April 1, and September 1. It is the responsibility of the bidder to obtain the new labor wage and hour rates when available from the State of Alaska Department of Labor, and to use the Prevailing wage scale and hiring requirements when formulating your bid.

For copies of this pamphlet, contact the nearest office of the Division of Labor Standards and Safety, Wage and Hour office or visit the internet site at:

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

END OF SECTION



## GENERAL REQUIREMENTS LOCATION

## PART 1 - GENERAL

## 1.01 SCOPE OF WORK

## A. GENERAL

1. Relocation of all Anchorage School District personal property in areas of construction shown on the drawings during the time specified herein.
2. Personal property is defined as all items not attached to the building.
3. The Anchorage School District personal property shall be moved within the building prior to the construction phase of the contract and after substantial completion
4. All personal property shall be identified by an inventory control system. A copy shall be provided to the Project Manager.
5. All work shall be coordinated with the Project Manager and Building Administrator.
6. The Owner will remove earthquake restraints from all personal property. Personal property to be moved after packing is completed.
7. The Owner will move copiers and telephones.
8. Contractor shall provide a spotter person for public safety when operating machinery.
9. Contractor shall be required to furnish all permits related to this contract, including a current Alaska Transportation Commission (A.T.C.), Common Carrier permit which allows the contractor to perform all duties as called for in this specification.
10. Contractor drivers shall be required to have the appropriate Commercial Drivers License (CDL).
11. Contractor shall abide by all laws pertaining to transportation, parking, fire lanes and safety.

## B. TEMPORARY STORAGE

1. ASD property shall be placed in temporary storage.
  - a. The Owner will provide temporary storage on site.
  - b. Property placed in temporary storage shall be identified by location of origin.
  - c. Upon substantial completion the contractor will advise the Project Manager that items in storage are ready to be moved to their permanent location. The Contractor will give the Owner 48-hours notice.

## C. DELAY IN UNPACKING

1. After the removal and movement of all items to destination locations, there shall be a delay for the unpack until the return of District personnel.

## D. IMPLEMENTATION MEETING

1. Prior to commencement of work under this specification section there will be an implementation meeting to discuss contract interfaces and to identify any problem areas apparent to ASD or the contractor.
2. The contractor shall bring to that meeting a list of key personnel who will be responsible for the execution of the packing/move, including a copy of driver's Commercial Drivers Licenses (CDL's) if materials are located off premises.
3. The Project Manager will coordinate the meeting with the building staff and the contractor.

## E. SITE CONDITIONS

1. For bidding purposes the following site conditions exist.
  - a. Hours of operation: Unoccupied.
  - b. Loading access: Main doors.
  - c. Fire Lanes: Fire lane is to remain clear around the perimeter of the building.
  - d. Handicaps Access: Keep access available during entire move.

## PART 2 PRODUCTS

## 2.01 PACKING MATERIALS

- A. All packing materials, (boxes, tape, pallets, wrap, dividers, etc.) shall be provided by the contractor.

## 2.02 SPECIAL MOVING LIBRARY BOOKS

- A. Books shall be transferred to and from original shelves using moving racks/shelves or boxes provided by the contractor.
- B. Boxed books shall be labeled by shelf number and location. Contractor shall provide shop drawings indicating layout of books to coordinate box labels with bookshelf numbers and labels.
- C. Contactor shall move empty shelves to the storage location.
- D. Books shall be stored back on original shelving at the storage location or in boxes.
- E. Books shall be returned to their original shelf location and order. (Dewey Decimal Classification)
- F. Contactor shall coordinate packing and unpacking of books with the school librarian.

## PART 3 EXECUTION

## 3.01 EQUIPMENT AND MANPOWER

- A. All equipment and manpower necessary for the move shall be provided by the contractor, including vehicles, hand trucks, furniture dollies, blankets, and other necessary items required for this contract.

## 3.02 IDENTIFICATION OF MATERIAL BEING MOVED

- A. All furniture, boxes, and other items packed by the contractor will be labeled with building destination and room number.

## 3.03 PACKING CONTENTS

- A. The contractor shall be responsible to pack items from bookshelves, storage cabinets, file cabinets, storage rooms, as appropriate.
- B. The Owner may box and labeled some property which contractor will move to destination site.
- C. Computers
  1. The Owner will properly shut down computers and unplug all cords.
  2. The contractor shall provide packing and transporting of the computers.

## 3.04 PLACEMENT OF FURNITURE

- A. Contractor shall place and position furniture in each office/classroom into its original location.

3.05 UNPACKING

- A. Contractor will be responsible for unpacking of contents packed by the contractor and for placement of contents in original location.
- B. The Owner will set up computers once unpacked by the contractor.

3.06 PACKING, TRANSPORTATION, STORAGE, UNPACKING

- A. The contractor shall provide all necessary supervision, labor, materials, tools, equipment, supplies, transportation, security, protection from inclement weather and all related requirements not mentioned to perform all service contemplated during the term of the contract in an orderly, timely, and efficient manner for the package, removal, limited storage, and reinstall at designated locations.
- B. Contractor shall pack and/or guarantee the safety of all material and equipment against loss or damage during the contract term (except for property in ASD temporary storage).
- C. Contractor shall reassemble all property disassembled during the move.

3.07 PROTECTION OF FINISHES

- A. Contractor shall be responsible for damage to buildings, installed equipment, walls, floors, doors, door jams, and elevators.
- B. Contractor shall provide protective floor coverings for carpeted areas and a minimum of 3/8 OSB in the gym and multipurpose floors.
- C. Contractor shall provide protective moving pads for elevators.

END OF SECTION



SUMMARY OF WORK

PART 1. GENERAL

1.01 RELATED DOCUMENTS

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

1.02 WORK COVERED BY CONTRACT DOCUMENTS

- A. The Work of this Contract comprises the general construction of the facility identified in the Solicitation including all noted site improvements.
- B. Definition of Site: Wherein the term Site is used in the contract documents, it shall mean the areas where work is to be performed; located as identified in the Solicitation and on the Contract Drawings.
- C. Acceptance of Site: The Contractor shall fully inform himself of the areas in which work is to be processed, material delivered, and limitation in working conditions, and access to work areas.
- D. Existing Conditions: The drawings may not show all arrangements and condition of the site as they now exist. The Contractor shall be responsible for a complete visual inspection.

1.03 CONTRACT

- A. Construct the work under a single fixed price contract as bound herein.
- B. It is the intent of these documents to require all work for a complete facility and plant with only minor owner-furnished items to be incorporated. See technical sections for specifics.

1.04 WORK FURNISHED AND INSTALLED BY OWNER

- A. Equipment and furniture as noted in documents. Other Contractors or ASD Maintenance personnel may be performing work at this facility concurrent with this project. See Section 1.07 below for requirements concerning coordination with Contractor's work.

1.05 GENERAL PROJECT DESCRIPTION

- A. General Description: At Steller Secondary School, located at 2508 Blueberry Road, Anchorage, AK 99503, the exterior doors in the main entry vestibule and the exterior doors in the vestibule heading to the rels will be removed and replaced. New electronic door hardware and access control will be added to those doors. The exterior doors in the south parking lot vestibule will also receive new electronic door hardware and access control. Video intercom monitors, door release buttons, and lockdown buttons to control the new door hardware will be added to the main office and principal's office.
- B. Construction:  
  
Provide all materials, labor, equipment, testing, tools, and supervision as required to properly complete the scope of work as described in the bid documents. The scope of work includes but is not limited to the following:

Demolish existing exterior door frames and doors at the main entry vestibule and vestibule to the relos. Demolish surrounding walls as needed to facilitate the installation of new doors, frames, and electrical components. Paint the new doors. Demolish existing door hardware at the south parking lot exterior vestibule doors.

Install and program new access control system. Update lockdown and panic buttons. Install door release buttons. Install new door hardware compatible with the new access control system on the new doors and at the south parking lot exterior vestibule doors. Perform electrical work as necessary to provide power to reconfigured spaces and door hardware. Perform electrical work as necessary to provide signal paths for access control devices and data.

- C. Sequence the start, conduct and completion of Work as required in Section 00200, Project Schedule Milestone Dates.

#### 1.06 CONTRACTOR'S USE OF PREMISES

- A. Limit use of premises for work and for storage to allow for:
  - 1. Area of site indicated on Contract Drawings
  - 2. Owner occupancy of existing building
  - 3. Public use
  - 4. Coordinated use of premises under direction of Project Manager.
  - 5. Full responsibility for protection and safekeeping of products under this Contract stored at Site.
  - 6. Moving any stored products, under Contractor's control, which interfere with operations of Owner or separate Contractor.

#### 1.07 OWNER'S USE OF PREMISES

- A. During the regular school year, conduct operations to minimize interference with normal school operations.
- B. Schedule any work which could interfere with school operations during summer vacation or when the school is not in session during the regular year.
- C. Cooperate with Project Manager in conducting operations to minimize conflict with and to facilitate Owner usage as established by the Project Manager.
- D. Schedule work to maintain Owner's continuous operation. Include in contract sum sufficient funds as may be required for any "after-hours" work caused by this requirement. No additional payment to Contractor will be authorized because of Contractor's failure to anticipate required "after-hours" work.
- E. At all times conduct operation as to insure the least inconvenience to students, staff, visitors, and the general public.
- F. The contractor shall provide advance notice at least 72 hours prior to any utility outages or other operations anticipated to inconvenience the school activities. The Project Manager will review and evaluate the request. The contractor may have to reschedule the operations to another time that will not impact school activities.
- G. The Contractor shall be responsible for maintaining power to the Fire Alarm, Security and Network systems to ensure they are in proper working order throughout the project. If the systems must be off-line during the project, the Contractor shall obtain written approval

from the Project Manager. During any time in which the fire alarm or security system is not operational, the Contractor shall provide a fire watch and security watch 24 hours a day, 7 days a week, for the entire period of the shutdown at no additional cost to ASD. The Contractor shall notify the ASD Project Manager of the intended method 72 hours prior to the shutdown.

1. An acceptable method of maintaining power to the fire alarm and security panels includes maintaining power during the entire period of the Electrical Utility Shutdown.
- H. While school is occupied by students and the general public the contractor must keep operational the emergency egress lighting.

#### 1.08 COORDINATION OF NOISE, DUST AND FUMES

- A. Contain noise, dust and fumes within work area. Notify Project Manager at least 24 hours prior to any necessary excessive noise, dust or fumes. Comply with the Project Manager's instructions.

#### 1.09 PRODUCTS FURNISHED BY OWNER AND INSTALLED BY CONTRACTOR

A. Owner's Responsibilities:

1. Arrange for and deliver necessary shop drawings, product data, and samples to Contractor.
2. Arrange and pay for product delivery to Site in accordance with construction schedule.
3. Deliver supplier's bill of materials to Contractor.
4. Inspect deliveries jointly with Contractor
5. Submit claims for Transportation damage.
6. Arrange for replacement of damaged, defective, missing or otherwise unacceptable items.
7. Arrange for manufacturer's warranties, bonds, service, and inspections as required.

B. Contractor's Responsibilities:

1. Designate delivery date for each product in construction schedule.
2. Receive and unload products at Site.
3. Promptly inspect products jointly with Owner, record shortages, damaged or defective items.
4. Handle products at Site, including uncrating and storage.
5. Protect products against damage and discoloration.
6. Assemble, install, connect, adjust, and finish products, as stipulated in respective Specification Sections.
7. Clean, repair, or replace items damaged by Contractor.

#### 1.10 SALVAGE RIGHTS

- A. Except where noted otherwise on contract documents, existing equipment which is removed as a part of the work shall become the property of the Contractor to dispose of as he sees fit.
- B. Remove scheduled materials and equipment without damaging items. Store items in protected environment. Coordinate with Owner for pick up and/or delivery to the owner. If delivered to the owner include project name and school for easy identification.

1.11 USE OF OWNER'S PROPERTY AND EQUIPMENT

- A. Use of Owner's property or equipment such as tools, ladders, furniture, janitorial equipment and supplies, etc., is strictly prohibited.

1.12 PERMITTING

- A. Contractor shall obtain all necessary building permits required to complete the scope of work identified in the contract documents. These include any/all subcontractor or specialty permits.
- B. Contractor shall ensure all required Municipal inspections, in accordance with the aforementioned permits, are requested and conducted prior to covering, closing or concealing the work in the field. Understanding and adhering to all MOA inspection requirements is mandatory. The Owner is not liable for re-inspection or rework costs associated with non-conforming or prematurely concealed work.
- C. Contractor shall maintain an inspection log and retain copies of all inspection reports, on site, for review by inspection officials and district project representatives.
- D. The District will be requiring preconstruction meeting with municipality building safety department.

END OF SECTION

## PROJECT COORDINATION

## PART 1. GENERAL

## 1.01 GENERAL CONTRACTOR

- A. Coordinate work of his own employees and subcontractors and coordinate his work with that of other contractors and Owner.
- B. Expedite his work to assure compliance with schedules.
- C. Comply with orders and instructions of the Project Manager.
- D. Monitor and control the use of site:
  - 1. Supervise field engineering and site layout.
  - 2. Allocate space for each subcontractor's use for field offices, sheds, work and storage areas.
  - 3. Establish access, traffic, parking allocations, and regulations.

## 1.02 GENERAL AND SUBCONTRACTORS SHALL DILIGENTLY COMPLY WITH THE FOLLOWING:

- A. Cooperate in planning and layout of the work well in advance of operations. Inform other contractors of requirements at proper time to prevent delay or revisions.
- B. Be informed of the requirements of other contractors and check own work for conflicts with the work of others.
- C. Ensure delivery of materials and performance of work on coordinated schedule with other contractors.
- D. Be responsible for proper layout of the work, and for all lines and measurements for all of the work executed under the contract documents. Verify the figures shown on the drawings before laying out the work and report any inaccuracies in writing to the Project Manager before commencing work. The Owner, Architect or their representative will in no case assume the responsibility for layout of the work.
- E. The mechanical and electrical trades shall be responsible for the layout of the ductwork, piping and conduits based on the reference lines established.

## 1.03 COORDINATING UTILITIES

- A. Cooperate and coordinate work with all utilities to be installed for service to Project. Utilities may include, but are not limited to water, sewer, natural gas, telephone, electrical, and cable television. Contractor shall maintain communication with utilities in order to coordinate time and requirements of utilities' installation.
- B. Contractor shall provide all work necessary to comply with requirements of Contract Documents for Utility work that does not meet Contract Document requirements, or for work that is disturbed by utility installation.

## 1.04 OWNER NOTIFICATION/REIMBURSEMENT

- A. Provide the Owner forty-eight (48) hours advance notice of his intention to work overtime,

nights, Sundays or holidays, or anytime outside the usual working hours. In no case will the Contractor do any such work without first notifying the Owner to permit arrangements for proper inspection. Unless of an emergency nature, work performed in violation of this paragraph will not be paid for.

- B. Reimburse the additional cost to the Owner for inspection work on Sundays or recognized holidays. Such reimbursement shall include all additional costs to the Owner.
- C. Reimbursement for inspection or observation required of the Project Manager or the Engineer on Sundays or recognized holidays shall be at the rate of One Hundred Fifty dollars (\$150.00) per man-hour of work.
- D. The contractor shall reimburse the additional cost to the owner, architect and consultants for inspection work beyond a first substantial of first final completion inspections. The contractor is expected to be virtually complete at time of substantial completion inspection with only minor punchlist items remaining. Should punchlist items remain at time of final inspection and should subsequent inspections be required, the contractor shall pay all costs for all.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION

CUTTING AND PATCHING

PART 1. PART GENERAL

1.01 DESCRIPTION OF WORK

- A. Cutting and patching is defined to include, but it not necessarily limited to, the cutting and patching of nominally completed work, and is defined to exclude integral cutting and patching during the manufacturing, fabricating, erecting, and installing process for individual units of work.
- B. Contractor shall be responsible for all cutting, fitting, and patching required to complete the work or to:
  - 1. Accommodate the coordination of work.
  - 2. Provide for installation of other work.
  - 3. Remove and replace defective work.
  - 4. Remove and replace work not conforming to requirements of Contract Documents.
  - 5. Uncover other work for access or inspection.
  - 6. Obtain samples for testing or similar purposes.
  - 7. Provide routine penetrations of nonstructural surfaces for installation of piping and electrical conduit.

1.02 RELATED REQUIREMENTS

- A. Section 00700 Article 4.14.
- B. Section 01010 - Summary of Work.
- C. Individual Specification Sections:
  - 1. Cutting and patching incidental to work of the Section.
  - 2. Advance notification to other Sections of openings required in work of those Sections.
  - 3. Limitations on cutting structural members.

1.03 SUBMITTALS

- A. Ten (10) days prior to beginning any demolition activities, the Contractor shall provide written notification to EPA, in accordance with NESHAP regulations, with copy to Project Manager. Notice shall indicate asbestos containing materials are or are not anticipated to be encountered. If no asbestos is anticipated, a negative declaration is made addressing 40CFR61.146 (a), (b) and (c,1-5).
- B. Submit written request in advance of cutting or alteration which affects:
  - 1. Structural integrity of any element of Project.
  - 2. Integrity of weather-exposed or moisture-resistant element.
  - 3. Efficiency, maintenance, or safety of any operational element.
  - 4. Visual qualities of sight-exposed elements.
  - 5. Work of Owner or separate contractor.
- C. Include in Request:
  - 1. Identification of Project.
  - 2. Location and description of affected work.
  - 3. Necessity for cutting and alteration.

4. Description of proposed work. Designate:
  - a. Scope of cutting and patching.
  - b. Contractor and trades to execute work.
  - c. Products proposed to be used.
  - d. Extent of refinishing.
5. Date and time work will be executed.

## PART 2. PRODUCTS

### 2.01 MATERIALS

- A. For replacement of work removed, comply with specifications for type of work to be done, unless otherwise noted.
- B. Provide materials for cutting and patching which will result in equal to or better than the work being cut and patched in terms of performance characteristics and visual effect where applicable.

## PART 3. EXECUTION

### 3.01 GENERAL

- A. Execute cutting, fitting, and patching to complete Work, and to:
  1. Fit the several parts together, to integrate with other Work.
  2. Uncover work to install or correct ill-timed Work.
  3. Remove and replace defective and non-conforming Work.
  4. Remove samples of installed Work for testing.
  5. Provide openings in elements of Work for penetrations of mechanical and electrical work.
  6. Repair surfaces damaged by removal or relocation of surface mounted or built-in items.

### 3.02 INSPECTION

- A. Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- B. Do not cut and patch work which is exposed to view in a manner resulting in a reduction of visual qualities or resulting in substantial evidence of the cut and patch work. Remove and replace work judged by Project Manager to be visually unsatisfactory.
- C. After uncovering, inspect conditions affecting performance of work.
- D. Beginning of cutting or patching means acceptance of existing conditions.

### 3.03 PREPARATION

- A. Clean adjacent structures and improvements of dust, dirt, and debris caused by cutting and patching operations, as directed. Return adjacent areas to condition existing prior to start of work.
- B. Provide supports to assure structural integrity of surroundings; devices and methods to

protect other portions of Project from damage.

- C. Provide protection from elements for areas which may be exposed by uncovering work; maintain openings free of water.

#### 3.04 PERFORMANCE

- A. Execute work by methods to avoid damage to other work, and which will provide proper surfaces to receive patching and finishing.
- B. Restore work with new products in accordance with requirements of Contract Documents.
- C. Fit work airtight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces. Maintain all fire assembly rating wall or area separation construction in accordance with applicable codes.
- D. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

END OF SECTION



MECHANICAL AND ELECTRICAL COORDINATOR

PART 1. GENERAL

1.01 DESCRIPTION

- A. Mechanical and electrical coordinator.
- B. Submittals.
- C. Coordination required.
- D. Coordination documents.
- E. Coordination of submittals.
- F. Coordination of substitutions and modifications.
- G. Observation of Work.
- H. Documentation.
- I. Inspection and acceptance of equipment.
- J. Equipment start-up.

1.02 RELATED SECTIONS

- A. Section 01010 - Summary of Work.
- B. Section 01300 - Submittals: Shop drawings, product data, and samples.
- C. Section 01650 - Starting of Systems: Starting of systems. Testing, Adjusting, and Balancing of Systems. Systems Demonstration.
- D. Section 01700 - Project Closeout: Project closeout procedures, project record documents, operation and maintenance data, warranties, and spare parts and maintenance materials.

1.03 MECHANICAL AND ELECTRICAL WORK COORDINATOR

- A. The Contractor shall employ a person, technically qualified and administratively experienced in field coordination for the mechanical and electrical work required for this Project, for the duration of the Work.

1.04 SUBMITTALS FOR REVIEW

- A. Submit coordination drawings and schedules prior to submitting shop drawings, product data, and samples.

1.05 COORDINATION REQUIRED

- A. Coordinate work of Divisions 26 and with work of other divisions.

- B. Coordinate progress schedules, including dates for submittals and for delivery of Products.
- C. Participate in progress meetings. Report on progress of Work to be adjusted under coordination requirements, and any required changes in schedules. Transmit minutes of meetings and Reports to concerned parties.

#### 1.06 COORDINATION DOCUMENTS

- A. Prepare coordination drawings to organize installation of Products for efficient use of available space, for proper sequence of installation, and to identify potential conflicts.
- B. Identify electrical power characteristics and control wiring required for each item of equipment.
- C. Maintain documents for the duration of the Work, recording changes due to site instructions, modifications or adjustments.
- D. After the Anchorage School District's review of original and revised documents, reproduce and distribute copies to concerned parties.

#### 1.07 COORDINATION OF SUBMITTALS

- A. Review Shop Drawings, Product Data, and Samples for compliance with Contract Documents and for coordination with work of the Project Manual. Transmit for review, copy reviewed documents to the Anchorage School District.
- B. Check field dimensions and clearances and relationship to available space and anchors.
- C. Check compatibility with equipment and Work of other sections, electrical characteristics, and operational control requirements.
- D. Check motor voltages and control characteristics.
- E. Coordinate controls, interlocks, wiring of pneumatic switches, and relays.
- F. Coordinate wiring and control diagrams.
- G. Review the effect of any changes on work of other sections.
- H. Verify information and coordinate maintenance of record documents.

#### 1.08 COORDINATION OF SUBSTITUTIONS AND MODIFICATIONS

- A. Review proposals and requests from Subcontractors.
- B. Verify compliance with Contract Documents and for compatibility with Work and Products of other sections. Submit with recommendation for action.

#### 1.09 OBSERVATIONS OF WORK

- A. Observe Work for compliance with Contract Documents.
- B. Maintain a list of observed deficiencies and defects; promptly submit a written report bi-weekly.

1.010 DOCUMENTATION

- A. Observe and maintain a record of tests. Record:
  - 1. Specification section number.
  - 2. Product and name of Subcontractor.
  - 3. Name of testing agency and name of inspector.
  - 4. Name of manufacturer's representative present.
  - 5. Date, time, and duration of tests.
  - 6. Type of test, and results. Retesting required.
  - 7. Submit copies of documentation to the Anchorage School District.

1.011 EQUIPMENT START-UP

- A. Verify utilities, connections, and controls are complete and equipment is in operable condition as required by Section 01650.
- B. Observe start-up and adjustments; record time and date of start-up, and results.
- C. Observe equipment demonstrations to Owner; record times and additional information required for operation and maintenance manuals.

1.012 INSPECTION AND ACCEPTANCE OF EQUIPMENT

- A. Prior to inspection, verify that equipment is tested, operational, clean, and ready for operation.
- B. Assist the Anchorage School District with review. Prepare list of items to be completed and corrected.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION



FIELD ENGINEERING

PART 1. GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Provide and pay for field engineering services required for project, i.e., civil, structural, or other professional engineering services required to execute Contractor's construction methods.

1.02 RELATED REQUIREMENTS

- A. Conditions of the contract.
- B. Section 01010: Summary of Work.
- C. Section 01700: Project Closeout.

1.03 QUALIFICATIONS OF SURVEYOR AND ENGINEER

- A. Provide Qualified Professional Engineer and Registered Land Surveyor with current Alaska license and acceptable to Contractor and Owner.

1.04 SURVEY REFERENCE POINTS

- A. Locate and protect bench marks, monuments, and other control points prior to starting site work, preserve all permanent points during construction.
  - 1. Make no changes or relocations without prior written notice to Project Manager.
  - 2. Report to Project Manager when any reference point is lost, destroyed or required relocation because of necessary changes in grades or locations.
  - 3. Require surveyor to replace project control points which may be lost or destroyed and establish replacements based on original survey control.

1.05 PROJECT SURVEY REQUIREMENTS

- A. Establish a minimum of two permanent bench marks on site, referenced to data established by survey control points.
- B. Record locations, with horizontal and vertical data, on Project Record Documents.
- C. Establish and identify lines, levels, contours, and datum by instrumentation or similar appropriate means for:
  - 1. Stakes for grading, fill, and topsoil placement.
  - 2. Utility slopes and invert elevations.
  - 3. Batter boards for structures.
  - 4. Building foundation, column locations, and floor levels.
  - 5. Controlling lines and levels required for mechanical and electrical trades.
- D. From time to time, verify layouts by same methods.

1.06 RECORDS

- A. Maintain a complete, accurate log of all control and survey work as it progresses.

1.07 SUBMITTALS

- A. Submit name and address of Surveyor and Professional Engineer to Project Manager.
- B. On request of Project Manager, submit documentations to verify accuracy of field engineering work.
- C. Submit certificate signed by Registered Engineer and Surveyor certifying that elevations and locations of improvements are in conformance with Contract Documents in the form of an "As-Built" survey.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION

## REGULATORY REQUIREMENTS

## PART 1. GENERAL

## 1.01 BUILDING CODES

- A. Construction which is not governed by a local building code or the Contract Specifications will be governed by the more stringent provisions of the latest published edition of Statute adopted edition with MOA local amendments, of the following applicable codes and regulations:

1. International Building Code (IBC)
2. International Existing Building Code (IEBC)
3. International Energy Conservation Code (IECC)
4. International Fuel Gas Code (IFGC)
5. International Mechanical Code (IMC)
6. International Fire Code (IFC)
7. National Electrical Code (NEC)
8. Uniform Plumbing Code (UPC)
9. ASHRAE 90-75 as applicable to Alaska
10. National Fire Code, Volumes 1-10
11. National Electrical Safety Code
12. NFPA Life Safety Code
13. NFPA National Fire Code
14. ADA Guidelines
15. Accessible and Useable Buildings and Facilities (ICC/ANSI A117.1)

## 1.02 APPLICABLE STANDARDS

- A. Where indicated, comply with the requirements and recommendations of the standards and other publications, except to the extent more detailed or more stringent requirements are indicated, including those of applicable codes and governing regulations.
- B. Where two or more standards or recommendations of trade associations apply to the same quality control requirement for the work, comply with the most stringent. Refer uncertain instances to the Project Manager for a decision.

## PART 2. PRODUCTS (NOT USED)

## PART 3. EXECUTION (NOT USED)

END OF SECTION



## ABBREVIATIONS AND DEFINITIONS

## PART 1. GENERAL

## 1.01 ABBREVIATIONS

- A. References in the contract documents to publications and recommendations by either name or abbreviation thereof include but are not necessarily limited to the following trade associations, technical societies, government agencies, recognized authorities and standards.

AAMA	Architectural Aluminum Manufacturers Association
AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AGA	American Gas Association
AGC	The Associated General Contractors of America
AI	The Asphalt Institute
AIA	The American Institute of Architects
AISC	American Institute of Steel Construction, Inc.
AISI	American Iron and Steel Institute
AITC	American Institute of Timber Construction
ANSI	American National Standards Institute
APA	American Plywood Association
ASAHC	American Society of Architectural Hardware Consultants
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc.
ASME	American Society of Mechanical Engineers
ASTM	American Society for testing and Materials
AWI	Architectural Woodwork Institute
AWPA	American Wood-Preservers' Association
AWPB	American Wood-Preservers' Bureau
AWS	American Welding Society, Inc.
CPSC	Consumer Product Safety Commission
CRA	California Redwood Association
CRSI	Concrete Reinforcing Steel Institute
CS	Commercial Standard of NBS (U.S. Department of Commerce)
CSI	The Construction Specifications Institute, Inc.
EPA	Environmental Protection Agency
FM	Factory Mutual Engineering Corp.
FGMA	Flat Glass Marketing Association
FS	Federal Specification (General Services Administration)
GA	Gypsum Association
HPMA	Hardwood Plywood Manufacturers Association
IBC	International Building Code
MFMA	Maple Flooring Manufacturers Association
MLMA	Metal Lath/Manufacturers Association
NAAMM	The National Association of Architectural Metal Manufacturers
NBFU	National Board of Fire Underwriters
NBHA	National Builders Hardware Association
NBS	National Bureau of Standards (U.S. Department of Commerce)
NEC	National Electrical Code by NFPA
NEMA	National Electrical Manufacturers Association
NFPA	National Fire Protection Association
N.F.P.A.	National Forest Products Association
NRCA	National Roofing Contractors Association

NSF	National Sanitation Foundation
NWMA	National Woodwork Manufacturers Association, Inc.
OSHA	Occupational Safety and Health Administration
PCA	Portland Cement Association
PCI	Prestressed Concrete Institute
RIS	Redwood Inspection Service (Grading Rules)
SDI	Steel Deck Institute
S.D.I.	Steel Door Institute
SIGMA	Sealed Insulating Glass Manufacturers Association
SJI	Steel Joist Institute
SMACNA	Sheet Metal and Air Conditioning Contractor's National Association, Inc.
SPR	Simplified Practice Recommendation of NBS
SSPC	Steel Structures Painting Council
TCA	Tile Council of America, Inc.
UL	Underwriters' Laboratories, Inc.
WCLA	West Coast Lumbermen's Association
WCLB	West Coast Lumber Inspection Bureau (Grading Rules)
WRI	Wire Reinforcing Institute
WWPA	Western Wood Products Association (Grading Rules)
W.W. P.A.	Woven Wire Products Association

- B. Refer to individual sections for other names and abbreviations of trade associations and standards applicable to specific portions of the work. In particular, refer to Divisions 23 and 26 for names and abbreviations applicable to mechanical and electrical work.

## 1.02 SPECIFICATION EXPLANATION

- A. The specifications are divided into divisions and sections for the convenience of writing and using. The titles of these are not intended to imply a particular meaning nor to fully describe the work of each division or section, nor to define the limits of any subcontract.
- B. These specifications are of the abbreviated, or "streamlined" type, and may include incomplete sentences.
- C. Omissions of words or phrases such as "the Contractor shall", "in conformity therewith", "shall be", "as noted on the drawings", "according to the plans", "a", "an", "the", and "all" are intentional.
- D. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the drawings.

## 1.03 DEFINITIONS

- A. Certain terms used generally throughout the specifications (and drawings) are hereby defined as follows:
1. Indicated: A cross reference to details, notes or schedules on the drawings, other paragraphs or schedules in the specifications, and similar means of recording requirements in the contract documents. Where terms such as "shown", "noted", "scheduled", and "specified" are used in lieu of "indicated", it is for the purpose of helping the reader accomplish the cross reference, and no limitation of location is intended except as specifically noted.
  2. Installer: The person or entity engaged by the Contractor or his Subcontractor or Sub-subcontractor for the performance of a particular unit or work at the project site, including installation, erection, application, and similar required operations. It

is a general requirement that installers be recognized experts in the work they are engaged to perform.

3. Furnish: Except as otherwise defined in greater detail, the term “furnish” is used to mean “...supply and delivery to the project site, ready for unpacking, assembly and installation...”.
4. Provide: Except to the extent further defined, the term “provide” means to furnish and install, complete and ready for the intended use.

1.04 DRAWINGS, DIMENSIONS AND MEASUREMENTS

- A. Where on any of the drawings a portion of the work is drawn out and the remainder is indicated in outline, the parts drawn out shall apply also to all other portions of the work.
- B. Wherever a detail is referenced and developed for a specific condition, same or similar detail shall apply to identical or similar conditions elsewhere on project even though not specifically referenced.
- C. Where the word “similar” occurs on the drawings, it shall be interpreted in its general sense and not as meaning identical, and all details shall be worked out in relation to their location and their connection with other parts of the work.
- D. The figured dimensions on the drawings or notes indicating dimensions shall be used instead of measurements of the drawings by scale, and shall be strictly complied with.
- E. No scale measurements shall be used as a dimension to work with except on “full size” drawings not dimensioned.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION



REFERENCED SPECIFICATIONS AND STANDARDS

PART 1. GENERAL

1.01 QUALITY ASSURANCE

- A. For products or workmanship specified by Referenced Specification or Standard, comply with requirements of the specification or standard, except when more rigid requirements are specified or are required by governing codes.
- B. Except where a specific date is specified, the date of the referenced specification standard is that in effect as of the bid date.
- C. Obtain a copy of all Referenced Specifications and Standards, and maintain at Jobsite during the specific work until Substantial Completion of the Project.

1.02 SCHEDULE OF REGULATORY AGENCY REFERENCES

- A. AASHTO American Association of State Highway and Trans. Officials  
444 North Capitol Street, N.W.  
Washington, DC 20001
- B. AAC Anchorage Administrative Code (and Local Amendments)  
Municipality of Anchorage  
4700 Elmore Rd  
Anchorage, AK 99507
- C. ADA Americans with Disabilities Act  
The Disabilities Rights Section  
Civil Rights Division  
P.O. Box 66738  
Washington, DC 20035-6738
- D. ANSI American National Standards Institute  
1430 Broadway  
New York, NY 1018
- E. ASA American Standards Association  
Now known as ANSI (See above)
- F. ASTM American Society for Testing Materials  
1916 Race Street  
Philadelphia, PA 19103
- G. ATBCB The U.S. Architectural and Transportation Barrier Compliance Board  
Suite 1000, 131 F St. NW  
Washington, DC 20004-1111
- H. CS Commercial Standards of the Commodities  
Division of the Department of Commerce  
Washington, DC 20006
- I. FM Factory Mutual Engineering and Research Corporation  
P. O. Box 688  
Norwood, MA 02062

REFERENCED SPECIFICATIONS AND STANDARDS

Division 1  
Section 01090

- J. F.S. Federal Specifications of the United States General Services Administration  
Specifications and Consumer Information Distribution Section (WFSIS)  
Washington, DC 20407
- K. IBC International Building Code published by the International Code Council (ICC)  
4051 West Flossmoor Road  
Country Club Hills, IL 60478-5795
- L. IEBC International Existing Building Code  
Published by ICC (See IBC above)
- M. ICC/ANSI A117.1-2003  
Accessible and Usable Buildings and Facilities  
Published by ICC (See IBC above)
- N. IECC International Energy Conservation Code  
Published by ICC (See IBC above)
- O. IFC International Fire Code  
Published by ICC (See IBC above)
- P. IFGC International Fuel Gas Code  
Published by ICC (See IBC above)
- Q. IMC International Mechanical Code  
Published by ICC (See IBC above)
- R. MOA Municipality of Anchorage MASS Specifications  
Public Works Dept.  
4700 Elmore Rd  
Anchorage, AK 99507
- S. NBFU National Bureau of Fire Underwriters  
85 John Street  
New York, NY 10017
- T. NEC National Electric Code published by the National Fire Protection Association  
(See NFPA below)
- U. NFPA National Fire Protection Association  
Battery March Park  
Quincy, MA 02269
- V. PS Product Standards of the Commodities  
Division of the Department of Commerce  
Washington, DC 20203
- W. UPC Uniform Plumbing Code  
Published by IAPMO  
5001 East Philadelphia Street  
Ontario, CA 91761-2816
- X. UL Underwriter's Laboratories  
333 Kingston Road  
Northbrook, IL 60062
- Y. State of AK State of Alaska Amendments  
Fire and Life Safety Regulations  
Juneau, AK

1.03 TRADE ASSOCIATION REFERENCES

- A. See specific specification sections.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION



## ALTERATION PROCEDURES

## PART 1. GENERAL

## 1.01 DESCRIPTION OF WORK

- A. Part of alteration work may expose portions of the building to the elements. During such periods Contractor shall take all necessary precautions to protect building elements to remain. Any damage due to negligence shall be repaired at no cost to the Owner.
- B. In addition to Cutting and Patching (Section 01045) and cut, move, or remove items as necessary to provide access or to allow alterations and new work to proceed. Include such items as:
  - 1. Repair or removal of hazardous or unsanitary conditions.
  - 2. Removal of abandoned items and items serving no useful purpose such as abandoned piping, conduit, and wiring.
  - 3. Removal of unsuitable or extraneous materials not marked for salvage, such as abandoned furnishings and equipment, and debris such as rotted wood, rusted metals, and deteriorated concrete.
  - 4. Cleaning of surfaces, and removal of surface finishes as needed to install new work and finishes.

## 1.02 RELATED REQUIREMENTS

- A. Section 00700 and 00800 - General and Supplementary General Conditions.
- B. Section 01045 - Cutting and Patching.
- C. Section 01300 - Submittals.
- D. Section 01500 - Temporary Facilities and Controls.

## 1.03 COORDINATION

- A. Coordinate scheduling, submittals, and Work of the various Sections of Specifications to assure efficient and orderly sequence of installation of interdependent construction elements, with provisions for accommodating items installed later.
- B. Verify that utility requirement characteristics of operating equipment are compatible with building utilities. Coordinate work of various Sections having interdependent responsibilities for installing, connecting to, and placing in service, such equipment.
- C. Coordinate space requirements and installation of mechanical and electrical work which are indicated diagrammatically on Drawings. Follow routing shown for pipes, ducts, and conduit, as closely as practicable; place runs parallel with line of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas, except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- E. Coordinate completion and cleanup of Work of separate sections in preparation for Substantial Completion.
- F. After Owner occupancy of premises, coordinate access to site for correction of defective

Work and Work not in accordance with Contract Documents, to minimize disruption of Owner's activities.

PART 2. PRODUCTS

2.01 ALTERATION PROJECT PROCEDURES

- A. Materials: As specified in Product Sections; match existing Products and work for patching and extending work.
- B. Close openings in exterior surfaces to protect existing work from weather and extremes of temperature and humidity.
- C. Remove, cut, and patch Work in a manner to minimize damage and to provide a means of restoring Products and finishes to specified condition.
- D. Refinish visible existing surfaces to remain in renovated rooms and spaces, to specified condition for each material, with a neat transition to adjacent finishes.
- E. Where new Work abuts or aligns with existing, perform a smooth and even transition. Patched Work to match existing adjacent Work in texture and appearance.
- F. When finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation for Project Manager review and approval.
- G. Where a change of plane of 1/8 inch or more occurs, submit recommendation for acceptable transition for Project Manager review and approval.
- H. Patch or replace portions of existing surfaces which are damaged, lifted, discolored, or showing other imperfections.
- I. Finish surfaces as specified in individual Product Sections.

PART 3. EXECUTION (NOT USED)

END OF SECTION

PROJECT MEETINGS

PART 1. GENERAL

1.01 DESCRIPTION

A. Work Included:

1. In general, project meetings will be held weekly at the job site in accordance with a mutually acceptable schedule. The Project Manager will conduct project meetings throughout the construction period.
2. The purpose of the project meetings is to enable orderly review of progress during construction and to provide for systematic discussion and analysis of problems that might arise between the Owner, Project Architect, Project Manager and/or Contractor relative to execution of the work.

B. Related Work described elsewhere:

1. The Contractor's relations with his subcontractors and material suppliers, and discussions relative thereto, are the Contractor's responsibility as described in the General Conditions and are not part of project meetings content.
2. Section 01400 describes the requirements for quality control meetings that will be held in addition to the requirements of this section.

1.02 AUTHORITY DESIGNATION

- A. Persons designated by the Contractor to attend and participate in project meetings shall have all required authority to commit the Contractor to solutions as agreed upon in the project meetings.

1.03 SUBMITTALS

A. Agenda Items:

To the maximum extent possible, advise the Project Manager forty-eight (48) hours in advance of the project meeting regarding all agenda items to be discussed, including tours in advance of the meeting.

1.04 AGENDA

A. Preconstruction Meeting

1. The Project Manager will conduct this meeting within fifteen (15) days after date of Notice to Proceed.
2. Location:  
Anchorage School District  
Capital Planning & Construction  
1301 Labar Street  
Anchorage, Alaska 99515  
(907) 348-5190
3. Attendance:
  - a. ASD Construction Supervisor
  - b. ASD Project Manager

- c. Architect and his Professional Consultants
  - d. Contractor's Project Manager and Superintendent
  - e. Major Subcontractors, as appropriate
  - f. Major Suppliers, as appropriate
  - g. Others as appropriate
4. Agenda items will include, but not be limited to:
- a. Designation of responsible personnel
  - b. Distribution (by Contractor) and discussion of list of major Subcontractors and Suppliers with addresses and telephone numbers
  - c. Project coordination
  - d. Procedures and processing of:
    - (1) Field decisions
    - (2) Submittals
    - (3) Proposal requests
    - (4) RFI's Change Orders
    - (5) Applications for Payment
    - (6) Schedules and Reports
  - e. Discussion of initial Project Schedule
  - f. Critical work sequencing
  - g. Major equipment deliveries and priorities
  - h. Adequacy of Contract Documents distribution
  - i. Procedures for maintaining Record Documents
  - j. Use of premises:
    - (1) Office, work, and storage area
    - (2) Owner's requirements
  - k. Construction facilities, controls, and construction aids
  - l. Temporary utilities
  - m. Safety and first-aid procedures
  - n. Security procedures
  - o. Housekeeping procedures
- B. Progress Meetings:
- 1. The Project Manager will conduct weekly meetings as required, at the Project Site to coordinate the work, answer questions, and resolve problems.
  - 2. Meeting Agenda will include but not be limited to:
    - a. Attendees:  
List of attendees and company they represent
    - b. Minutes Review:  
Corrections, additions, and/or deletions to previous minutes
    - c. Outstanding Action Items:  
Review of items not resolved from previous meeting
    - d. Submittal status
    - e. Request for Information status
    - f. Request for Proposal Status
    - g. Schedule Review:
    - h. Project job concerns
    - i. Next meeting
    - j. Summarize and Review of all Action Items:
  - 3. All items to be discussed shall be addressed at the time scheduled on the agenda. All attendees shall familiarize themselves with the agenda and be prepared in

advance with their items for discussion.

C. Special Meetings:

The Project Manager may call special meetings at the project site or the office of the Project Manager to coordinate the work, answer questions, and resolve problems.

1.05 MINUTES

- A. The Project Manager will compile minutes of each project meeting and will distribute copies to all interested parties within seven (7) calendar days after the meeting. Items in the minutes shall be numbered consecutively and grouped under divisions and sections. Each item shall be carried forward until resolved.
- B. The minutes compiled by the Project Manager will be the official record minutes and all clarifications and/or corrections shall be transmitted in writing to the Project Manager within fourteen (14) days of date of receipt of the minutes or unless noted during the next scheduled meeting under the appropriate agenda item. Transmitted corrections shall be legibly submitted on company letterhead.
- C. At least one (1) bound volume of all minutes shall be maintained by the Contractor in the job office until project completion.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION



SUBMITTALS

PART 1. GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures
- B. Construction Progress Schedules
- C. Schedule of Values
- D. Shop Drawings
- E. Product Data
- F. Samples
- G. Manufacturer's Instructions
- H. Manufacturer's Certificates

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Work
- B. Section 01311 - Project Schedule
- C. Section 01340 - Shop Drawings, Product Data and Samples
- D. Section 01370 - Schedule of Values
- E. Section 01400 - Quality Control
- F. Section 01630 - Substitution and Product Options
- G. Section 01700 - Project Close Out
- H. Section 01710 - Cleaning
- I. Section 01720 - Project Record Documents
- J. Section 01730 - Operating and Maintenance Data
- K. Section 01750 - Closeout Forms

1.03 PROCEDURES

- A. Deliver submittal documents to the Project Manager using the ASD Procore Construction Management Program. Number each submittal with the section number, dash, numerical order of the submittal, example 03300-1. Add an alpha to each resubmittal, example, 03300-1A. Deliver samples to the Project Manager or Architect as directed to the address listed on the cover of the project manual.

- B. Transmit each item with company submittal. Identify Project, Contractor, subcontractor, major supplier; identify pertinent Drawing sheet and detail number and specification section number, as appropriate. Identify deviations from Contract Documents. Provide space for Contractor and Architect/Engineer review stamps.
- C. Submit initial progress schedules and schedule of values in duplicate prior to issuance of Notice to Proceed. After review by the Architect/Engineer, revise and resubmit as required. Submit revised schedules with each application for payment, reflecting changes since previous submittal.
- D. Comply with progress schedule for submittals related to work progress. Coordinate submittal of related items.
- E. Distribute copies of reviewed submittals to concerned persons. Instruct recipients to promptly report any inability to comply with provisions. Review with subconsultants/suppliers any inability to meet requirements of project. Find solutions with subconsultants/suppliers making conformance with documents possible. Review solutions with owner and architect for acceptance prior to proceeding with work.

1.04 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit Project Schedule as called for in Section 01311, Project Schedule.

1.05 SCHEDULE OF VALUES

- A. Submit Schedule of Values as called for in Section 01370, Schedule of Values.

1.06 SHOP DRAWINGS, PRODUCT DATA & SAMPLES

- A. Submit in the form as called for in Section 01340.

1.07 MANUFACTURERS' INSTRUCTIONS

- A. When required in individual specification section, submit manufacturers printed instructions for delivery, storage, assembly, installation adjusting and finishing, in quantities specified for product data.

1.08 FIELD SAMPLES

- A. Provide field samples of finishes at project site as required by individual specification sections. Install sample complete and finishes. Acceptable samples in place may be retained in completed work.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION

PROJECT SCHEDULE

PART 1. GENERAL

1.01 GENERAL REQUIREMENTS

- A. The work under this Section consists of Project Schedule (“Schedule”) requirements including the preparation of a Schedule and Schedule Revisions. The Schedule shall be developed by the Contractor and shall be in accordance with the requirements of this Section 01311. No direct payment will be made to the Contractor for performing and complying with the requirements of this Section 01311.
- B. The Schedule will be prepared by the Contractor for this Project and made available to the Owner. It is intended that the Schedule will reflect the Contractor’s actual construction plan. The existence of schedules, networks, vector charts or any other charts or services, shall in no way relieve the Contractor of the responsibility of the Contract Document including, but not limited to the responsibility of completing the Work within the contract time and the responsibility of planning, scheduling and coordinating the Work.
- C. The Schedule shall be in the form of a bar chart or other format approved by the project manager.

1.02 REFERENCES

- A. Associated General Contractors of America, “Construction Planning & Scheduling,” Copyright January 1994 (AGC’s Manual), also referred to as AGC Publication No. 1107.1. The general principles stated in the AGC’s Manual shall be used in preparing and updating the Project Schedule, except that the requirements of this Section shall govern.
- B. Related Requirements:
  - 1. Section 00700 and 00800 - General Conditions and Supplementary General Conditions
  - 2. Section 00200 - Project Schedule Milestones Dates
  - 3. Section 01370 - Schedule of Values

PART 2. PRODUCTS

2.01 PROJECT SCHEDULE

- A. Within fourteen (14) calendar days following the Notice to Proceed, the Contractor shall submit for the Project Manager’s review, comment and acceptance, a Project Schedule (“Schedule”). The Schedule shall show the activities of work in sufficient detail to demonstrate that the Contractor has a reasonable and workable plan to complete the Project in accordance with the Project Schedule Milestone Dates set forth under Section 00200 of the Contract Documents. The Contractor shall submit two (2) prints of the Schedule, which shall be neatly organized and time scaled from left to right on 11 in. x 17 in. sheets, or 24 in. x 36 in. sheets, at the Contractor’s discretion.
- B. Within five (5) calendar days of receipt of the Schedule, the Project Manager shall meet face to face with the Contractor to review the plan and to determine if there are any concerns regarding the Contractor’s plan to execute the work. If a resubmittal of the Schedule is required by the Project Manager, the Contractor shall revise and resubmit the Schedule incorporating the Project Manager’s comments within seven (7) calendar days after this review meeting. Progress payments will be withheld until the Contractor submits an approvable Schedule.

C. Revisions to the Schedule shall be done in accordance with paragraph 2.02.

## 2.02 PROJECT SCHEDULE REVISIONS

A. Should the Contractor, after acceptance of the Schedule, desire to change his plan of construction, he shall submit his proposed revisions to the Project Manager, along with a written rationale for the revisions. Only the requested changes accepted by the Project Manager will be incorporated into the Schedule in the next reporting period.

## 2.03 TIME IMPACT ANALYSIS FOR CONTRACT MODIFICATIONS, CHANGES OR DELAYS

A. If the Contractor believes that a change under Article 12 Paragraph 12.1 causes an increase or decrease in the Contractor's time for completing the Work, he shall complete a Time Impact Analysis that demonstrates how the Contractor proposes to incorporate or has incorporated the Change into the Schedule and the time impact, if any, on the Schedule Milestone Dates set forth under Section 00200 of the Contract Documents.

1. The Time Impact Analysis shall demonstrate the time impact based upon the date the Change in Work is directed by the Project Manager; the status of construction at that point in time; and the event time computations of all affected activities. The event times used in the Time Impact Analysis shall be those set forth in the update of the Schedule in effect at the time the Change in Work is directed by the Project Manager.
2. The Time Impact Analysis is based on an "as-planned" to "as-built" comparison of the event times. In developing an as-built schedule of performance, the Contractor shall utilize actual daily performance data from Schedule Updates and the Contractor's daily construction reports to graphically depict the sequence and manner in which the Contractor actually performed the Work under the Contract.

B. Activity delays shall not automatically mean that an extension of the Contract Time is warranted or due the Contractor. It is possible that a modification, change or delay will not affect projected or as-built critical activities or cause non-critical activities to become critical. A modification, change or delay may result in only absorbing a portion of the available total float that may exist within an activity chain of the Schedule, thereby not causing any effect on the Contract Time.

C. Each Time Impact Analysis shall be submitted as follows:

1. Within fourteen (14) calendar days after receipt of a written order designated or indicated to be a change in accordance with Article 12, Changes in the Work;
2. Within fourteen (14) calendar days after the furnishing of written notice by the Contractor;
3. Within fourteen (14) calendar days from the commencement of a delay related to unforeseeable conditions; provided the Contractor complies with the requirements of the Contract Documents regarding said condition.

D. In cases where the Contractor does not submit a written request for extension of time and Time Impact Analysis within the time stated above in Paragraph 2.03, it is mutually agreed that the Change in the Work does not require an extension of the Contract Time.

E. Acceptance or rejection of each Time Impact Analysis which requests an extension of the Contract Time shall be made by the Project Manager within fourteen (14) calendar days after receipt of each Time Impact Analysis, unless subsequent meetings and negotiations are necessary. Upon acceptance, the Time Impact Analysis shall be incorporated into the Schedule.

F. Time Impact Analysis related to requests for an extension of the Contract Time and/or Change Order work shall be incorporated into and attached to the applicable Change Order(s).

- G. No revision to any Schedule Milestone Date or contractually mandated schedule provisions will be permitted without authorization from the Project Manager.

2.04 COMPLIANCE WITH THE SCHEDULE

- A. The Contractor shall furnish sufficient labor and equipment resources, offices, and facilities, and shall work such hours, including night shift and overtime operations as necessary, to ensure the prosecution of the Work in accordance with the Schedule. If the Contractor falls behind in meeting the Schedule, the Contractor shall take such steps as may be necessary to improve its progress. If the Contractor fails to take such steps, the Project Manager may require the Contractor to increase the hours of work, the number of shifts, overtime operations, the number of workers and/or the amount of construction plant and equipment without additional cost to the Owner. The provisions of this subsection shall not be construed as prohibiting work on Saturdays, Sundays, and holidays, if the Contractor so elects and gives 24 hours' notice to the Project Manager.
- B. Failure of the Contractor to comply with the requirements of this Subsection 2.04 shall be a basis for determination by the Project Manager that the Contractor is not prosecuting the Work with such diligence as will ensure completion of the Work in accordance with the requirements of the Contract Documents. Upon such determination, the Project Manager may terminate the Contractor's right to proceed with the Work or any separable part thereof, in accordance with the clause entitled "Termination of Contract" of the Contract Documents, or may take such other actions as he may deem appropriate.

PART 3. EXECUTION (NOT USED)

END OF SECTION



## SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES

## PART 1. GENERAL

## 1.01 RELATED DOCUMENTS

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

## 1.02 DESCRIPTION

- A. Prepare and submit to the Project Manager with the Construction Schedule, a separate schedule listing dates for submission and of review for shop drawings, product data, and samples, refer to General Conditions 4.12.13.1. Include installing Subcontractors name responsible for that portion of the Work
- B. Submit Shop Drawings, Product Data, and Samples as may be required, whether mentioned specifically in Contract Documents or not.
- C. Individual submittals shall not include material covering more than one section of the specifications.
- D. Products fabricated and/or installed prior to approval of submittals are subject to demand for removal and replacement with approved products by the Contractor at no additional cost to the Owner.
- E. Shop drawing submittal cannot be used for product substitution submittal. See Section 01630 for required procedure.

## 1.03 RELATED REQUIREMENTS

- A. Section 01311: Project Schedule
- B. Section 01630: Substitution and Product Options
- C. Section 01720: Project Record Documents

## 1.04 SHOP DRAWINGS

- A. Prepare original drawings (by Contractor, subcontractor, manufacturer, supplier, or distributor), which illustrate some portion of the work; showing fabrication, layout, setting or erection details.
- B. Prepare shop drawings for this particular project. Drawings prepared for other projects and revised for this project will be rejected.
- C. When necessary, base shop and setting drawings upon actual measurements taken at site and other job conditions. Show any variations and revisions to Contract Documents that are necessary for proper installation of work. Fabrication or installation of work shall not be started until shop or setting drawings have been reviewed and returned by Architect, with his stamp and comments.
- D. Identify details by reference to sheet and detail, schedule or room numbers shown on Contract Drawings.

- E. Minimum sheet size: 8 ½" x 11". Note: Submit full-size sheet submittals. Use of 8 ½" x 11" format subject to readability and approval of architect.

#### 1.05 PRODUCT DATA

- A. Manufacturer's standard schematic drawings:
1. Modify drawings to delete information which is not applicable to project.
  2. Supplement standard information to provide additional information applicable to project.
- B. Manufacturer's catalog sheets, brochures, diagrams, schedules, performance charts, illustrations, and other standard descriptive data.
1. Clearly mark each copy and identify pertinent materials, products or models.
  2. Show dimensions and clearances required.
  3. Show performance characteristics and capacities.
  4. Show wiring diagrams and controls.
  5. Catalog cuts and descriptive data sheets shall include a complete listing of repair and replacement parts for all equipment and the name and address of a source of supply for parts and service.

#### 1.06 SAMPLES

- A. Physical examples to illustrate materials, equipment or workmanship and to establish standards by which completed work is judged.
- B. Office Samples: Of sufficient size and quantity to clearly illustrate:
1. Functional characteristics of product or material, with integrally related parts and attachment devices.
  2. Full range of color, texture and pattern.
- C. Field Samples and Mock-Ups:
1. Erect at project site at location acceptable to Project Manager.
  2. Construct each sample or mock-up complete, including work of all trades required in finished work.
  3. After review, samples may be used in construction of Project.

#### 1.07 SUBMITTAL REQUIREMENTS

- A. Make all submittals far enough in advance of scheduled dates for installation to provide all required time for review, for securing necessary approvals, for possible revision and resubmittals and for placing orders and securing delivery. Submission of all shop drawings shall be through the General Contractor.
- B. The contractor shall allow at least 14 days for review of original submittals or resubmittals except as follows:
1. Structural steel shop drawings shall be broken down into separate submittal packages for most efficient review and delivered at least two weeks apart.
  2. Division 23
    - a. Plumbing shop drawings - 21 days
    - b. Heating shop drawings - 21 days
    - c. Ventilation shop drawings - 28 days
    - d. Coordination shop drawings - 21 days

3. Division 26
  - a. Special Systems shop drawings - 21 days
- C. Submit one (1) reproducible unfolded transparency print of shop drawing. Upon Architects approval, Contractor shall provide five (5) opaque prints for owners use. Transparency will be returned to Contractor for printing and distribution as needed. Additional copies will be returned without review or mark-ups.
- D. Submit four (4) each of samples.
- E. Unless otherwise specifically permitted by the Project Manager, make all submittals in groups containing all associated items. Partial submittals may be rejected.
- F. Accompany submittals with transmittal letter, in duplicate, containing:
  1. Date
  2. Project Title and number
  3. Contractor's name and address
  4. The number of each shop drawing, product data and sample submitted
- G. Submittals shall include:
  1. Date and revision dates
  2. Project title and number
  3. The name of:
    - a. Architect
    - b. Contractor
    - c. Subcontractor
    - d. Supplier
    - e. Manufacturer
    - f. Separate detailer when pertinent
  4. Identification of product or material
  5. Relation to adjacent structure or materials
  6. Field dimensions, clearly identified as such
  7. Specification section number
  8. Applicable standards, such as ASTM number or Federal Specifications.
  9. A blank space, for Architect's review stamp

#### 1.08 CONTRACTOR RESPONSIBILITIES

- A. Review shop drawings, product data, and samples prior to submission.
- B. Include noted and required corrections and indicate by stamp and signature that submittal is acceptable to Contractor. Submittals without stamp and signature will be rejected.
- C. Verify:
  1. Field measurements.
  2. Field Construction criteria.
  3. Conformance with specifications.
- D. Coordinate each submittal with requirements of work and Contract Documents.
- E. Contractor's responsibility for errors and omissions in submittals is not relieved by Architect's review and approval.
- F. Contractor's deviations in submittal requirements shall not relieve Contractor from

completing Contract requirements.

- G. The submittal documents shall be transmitted using the ASD Procore Construction Management Program. Number the submittals with the CSI Section then a dash then the numerical order (01650-1). Resubmittals shall have the same number with an alpha at the end. (01650-1A).
- H. Contractor shall update the Procore Submittal Log on a weekly basis until Submittal Process is complete.

#### 1.09 RESUBMITTAL REQUIREMENTS

- A. Revise initial drawings as required and resubmit as specified for initial submittal.
- B. Indicate on drawings any changes which have been made other than those requested by the Architect.
- C. Project data and samples: Submit new data and samples as required for initial submittal.

#### 1.10 ARCHITECT'S DUTIES

- A. Review submittals with a turn-around time for review of original or resubmittal of no more than fourteen (14) calendar days, except as indicated in paragraph 1.07 B above.
- B. The review will be for conformance to the design concept and compliance with information given in the Contract Document. The Architect will make notations directly on the reproducible.
- C. The review is intended to foresee unacceptable products to avoid the possibility of their rejection at the site. The review shall not be construed as:
  - 1. Permitting a departure from the Contract Documents, unless specifically so noted.
  - 2. Relieving the Contractor of the responsibility for errors or omissions.
  - 3. Acceptance of an assembly in which an approved item is a part.
  - 4. Approval of variations from previously approved items.
  - 5. Approval of dimensions.
- D. The Architect will review all samples. Such review will be for appearance only. Compliance with all other requirements is the responsibility of the Contractor.
- E. Affix stamps and initials or signatures certifying the review of submittal.
- F. Where the Contract Documents require the design of the structural, mechanical, or electrical systems or components of systems by a supplier, such systems or components shall be designed by a registered professional engineer and all calculations submitted to the Architect for his records, prior to starting fabrication or installation of the work. The Architect will not be responsible for the designs of such other Professionals.

#### 1.11 VARIATIONS FROM CONTRACT DOCUMENTS

- A. See Section 01630 for procedure.
- B. If the Contractor fails to mention variations from the Contract Documents, he will not be relieved of the responsibility for executing the work in accordance with the Contract Documents.

1.12 SUBMITTALS FOR COLOR SELECTION

- A. The Contractor shall take particular note that color selections cannot be made for the project until such time as all items requiring color selection have been submitted. After such submittal has been made, the Architect with Owner's concurrence will within fourteen (14) days, make a complete color selection for the entire project.
- B. It will be the contractor's responsibility to review the Contract Documents completely to determine items requiring color selection, obtain color samples from the manufacturer and submit to the Architect at the earliest possible date.

1.13 DISTRIBUTION OF SUBMITTALS AFTER REVIEW

- A. Contractor shall distribute copies of shop drawings and product data which carry Architect's stamp, to:
  - 1. Contractor's file (required)
  - 2. Job-site file (required)
  - 3. Record Documents file (required)
  - 4. Other prime Contractors (as required)
  - 5. Subcontractors (as required)
  - 6. Supplier (as required)
  - 7. Fabricator (as required)
  - 8. Others (as required)

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION



SCHEDULE OF VALUES

PART 1. GENERAL

1.01 RELATED DOCUMENTS

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

1.02 REQUIREMENTS INCLUDED

- A. Procedures for preparation and submittal of Schedule of Values.

1.03 RELATED REQUIREMENTS

- A. Section 00700 - General Conditions and Section 00800 Supplemental Conditions of the Construction Contract.
- B. Section 01311 – Project Schedule.

1.04 FORMAT

- A. Schedule of Values shall be submitted on ASD Form 100B.

1.05 CONTENT

- A. List installed value of each major item of work and each subcontracted item of work as a separate line item to serve as a basis for computing values for progress payments. Round off values to nearest dollar.
- B. For each major subcontract, list products and operations of that subcontract as separate line items.
- C. Include work allowances within line item of work.
- D. Coordinate listings with progress schedule.
- E. Component listings shall each include a directly proportional amount of Contractor's overhead and profit.
- F. For items on which payments will be requested for stored products, list the cost of stored products.
- G. The sum of values listed shall equal total contract sum.
- H. In addition to the above, values shall be listed for the following close out items.
  - 1. As-builts.
  - 2. O & M Manuals.
  - 3. Warranties.
  - 4. Landscape Maintenance Warranty.
  - 5. Owner Training.
  - 6. Demobilization (If mobilization is itemized).
  - 7. Project close-out must retain a minimum of \$25,000.00.

1.06 SUBMITTAL

- A. Transmit under transmittal letter. Identify project by title and contract number.

1.07 SUBSTANTIATING DATA

- A. When the Project Manager requires substantiating information, submit data justifying line item amounts in question.
- B. Provide one copy of data with cover letter for each copy of application. Show application number, date and line item by number and description.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION

## CONSTRUCTION PHOTOGRAPHS

## PART 1. GENERAL

## 1.01 REQUIREMENTS INCLUDED

- A. Construction Photographs.
- B. Submittals.

## 1.02 RELATED REQUIREMENTS

- A. Section 01720 - Project Record Documents

## 1.03 PHOTOGRAPHY

- A. Provide photographs of construction throughout progress of work.
- B. Take photographs prior to covering completed work.
- C. Take photographs at beginning and completion of elements of construction.
  - 1. Asbestos Abatement process indicating the phases of abatement including:
    - a. Existing Conditions
    - b. Preparation Prior to Start of Work
    - c. Work in Progress
    - d. Completed Work
    - e. Equipment used for Abatement Processes
  - 2. Roof demolition
    - a. Repairs
    - b. Documentation of interim building protection measures
    - c. Work in Progress
    - d. Completed work
    - e. Include roof designation and locations
  - 3. Air infiltration and/or vapor barrier installation
  - 4. Insulation installation
  - 5. Final completion.
- D. The Contractor, on a daily basis, shall photograph the demolition and abatement process. For their own use and distribution, the Project Manager shall on a regular basis, direct photographs and/or video recordings of construction operations and work in progress.

## 1.04 IMAGES

- A. Digital images to be uploaded to the ASD Procore Construction Management Program Project Folder daily.
- B. Photo file name to include location, item photographed and orientation of view.

1.05 TECHNIQUE

- A. Provide factual presentation.
- B. Provide correct exposure and focus, high resolution and sharpness, maximum depth of field and minimum distortion.
- C. The Contractor shall furnish access, labor and facilities to assist photographer(s). Photographs shall be taken with a Digital type camera with flash attachment in working order.
  - 1. Furnish the Project Manager with a quantity equal to minimum ten (10) photographs per work area per day ISO appropriate to lighting conditions.

1.06 VIEWS

- A. Consult with Project Manager for instructions on views required.
- B. Locations of photos. It is preferred to have similar angles and locations of existing conditions, in progress and complete photos.

1.07 SUBMITTALS

- A. All photos to be loaded in Procore and labelled.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION

## QUALITY CONTROL

### PART 1. GENERAL

#### 1.01 RELATED REQUIREMENTS

- A. Section 00700 - General Conditions and Section 00800 – Supplemental Conditions to the Construction Contract.
- B. Section 01090 - Reference Specifications and Standards.
- C. Section 01300 - Submittals.
- D. Section 01410 - Testing Laboratory Services.
- E. Section 01420 - Special Inspections

#### 1.02 GENERAL REQUIREMENTS

- A. The contractor is responsible for quality control and shall establish and maintain an effective quality control system in compliance with this section. The quality control system shall consist of plans, procedures, and organization necessary to produce an end product which complies with the contract requirements. The system shall cover all construction operations, both onsite and offsite, and shall be keyed to the proposed construction sequence.

#### 1.03 QUALITY CONTROL PLAN

- A. The Contractor shall furnish for review by the Owner, not later than 30 days after receipt of notice to proceed, the Contractor Quality Control (CQC) Plan proposed to implement the requirements of this section. The plan shall identify personnel, procedures, control, instructions, tests, records, and forms to be used.
  - 1. Content of the CQC Plan: The CQC Plan shall include, as a minimum, the following to cover all construction operations, both onsite and offsite, including work by subcontractors, fabricators, suppliers, and purchasing agents:
    - a. A description of the quality control organization, including the name, qualifications (in resume format), duties, responsibilities, and authorities of each person assigned a CQC function, including the person assigned responsibility of CQC manager.
    - b. Control, verification, and acceptance testing procedures for each specific test to include the test name, specification paragraph requiring test, feature of work to be tested, test frequency, and person responsible for each test. (Laboratory facilities will be approved by the Owner.)
    - c. Procedures for tracking preparatory and follow-up control phases, verification, and acceptance tests, including documentation.
    - d. Procedures for tracking construction deficiencies from identification through acceptable corrective action. These procedures shall establish verification that identified deficiencies have been corrected.
    - e. Reporting procedures, including proposed reporting formats.
    - f. A list of the definable features of work. A definable feature of work is a task which is separate and distinct from other tasks, has separate control requirements, and may be identified by different trades or disciplines, or it may be work by the same trade in a different environment. Although each section of the specifications may generally be considered as a definable feature of work, there are frequently more than one definable features under a particular section.

2. Acceptance of Plan: Acceptance of the Contractor's plan is required prior to the start of construction. Acceptance is conditional and will be predicated on satisfactory performance during the construction. The Owner reserves the right to require the Contractor to make changes in the CQC Plan and operations including removal of personnel, as necessary, to obtain the quality specified.
3. Notification of Changes: After acceptance of the CQC Plan, the Contractor shall notify the Owner in writing of any proposed change. Proposed changes are subject to acceptance.

#### 1.04 COORDINATION MEETING

- A. After the Preconstruction Conference and before start of construction, the Contractor shall meet with the Project Manager to discuss the Contractor's quality control system. The CQC Plan shall be submitted for review a minimum of 15 calendar days prior to the Coordination Meeting. During the meeting, a mutual understanding of the system details shall be developed, including the forms for recording the CQC operations, control activities, testing, administration of the system for both onsite and offsite work, and the interrelationship with the Owner's special inspection personnel. Minutes of the meeting shall be prepared by the Contractor and signed by both the Contractor and the Project Manager.

#### 1.05 QUALITY CONTROL ORGANIZATION

- A. CQC Manager: The Contractor shall identify as CQC Manager an individual within the onsite work organization who shall be responsible for overall management of CQC and have the authority to act in all CQC matters for the Contractor. The CQC Manager shall be a person with a minimum of ten (10) years' experience in construction with a minimum of three (3) years' experience in Quality Control Management or Construction Inspection, preferably with some formal Quality Control training. This CQC Manager shall be on the site at all times during construction and shall be employed by the prime Contractor.
- B. CQC Personnel: In addition to CQC personnel specified elsewhere in the contract, the Contractor shall provide as part of the CQC organization specialized personnel to assist the CQC Manager for the following areas: electrical, mechanical, structural, and architectural. Each of these individuals must have either an engineering degree in their respective field and two years of experience or five (5) years of related experience. These individuals are to be responsible to the CQC Manager; be physically present at the construction site during work on their areas of responsibility; have the necessary education and/or experience in accordance with this section. These individuals may perform other duties but must be allowed sufficient time to perform their assigned quality control duties as described in the Quality Control Plan.
- C. ASD CQC Testing Requirements: See Attachment 1 below.

**ASD CQC TESTING REQUIREMENTS**

<b>MATERIAL TESTED</b>	<b>CHARACTERISTIC TESTED</b>	<b>SAMPLE FREQUENCY</b>	<b>SAMPLING POINT</b>	<b>REPORT DUE</b>
CLASSIFIED FILL MATERIAL AND BACKFILL (TYPE II, TYPE IIA, BLENDED, ETC.)	GRADATION	1 PER SOIL TYPE AND NOTABLE CHANGE IN CHARACTERISTICS	PRIOR TO PLACEMENT	BEFORE USE ON PROJECT
	MOISTURE DENSITY (PROCTOR)			
	COMPACTION/DENSITY	STRUCTURAL = 1 PER LIFT & PER 500 S.F. TRENCHES = 1 PER LIFT & PER 150 L.F. FLATWORK = 1 PER LIFT & PER 5000 S.F.	IN PLACE	PRIOR TO NEXT LIFT
LEVELING COURSE (D-1, RAP, ETC.)	GRADATION	1 PER SOIL TYPE AND NOTABLE CHANGE IN CHARACTERISTICS	PRIOR TO PLACEMENT	BEFORE USE ON PROJECT
	MOISTURE DENSITY (PROCTOR)			
	COMPACTION/DENSITY	FLATWORK = 1 PER LIFT & PER 5000 S.F.	IN PLACE	PRIOR TO NEXT LIFT
STRUCTURAL IN-SITU BASE OF EXCAVATION (BOTTOM OF HOLE)	GRADATION	1 PER IN-SITU STRUCTURAL BOTTOM OF HOLE AND NOTABLE CHANGE IN CHARACTERISTICS	PRIOR TO PLACEMENT	BEFORE BUILDING UPON
	MOISTURE DENSITY (PROCTOR)			
	COMPACTION/DENSITY	BASE OF EX. = 1 PER FOUNDATION AREA	IN PLACE	BEFORE BUILDING UPON
STRUCTURAL CONCRETE	SAMPLING	1 MINIMUM PER PLACEMENT, PER DAY (1-25 C.Y.), 1 EVERY 50 C.Y. THEREAFTER. 1 AFTER EACH ADDITION OF ADMIXTURE OR WATER (SLUMP AND AIR ONLY AFTER ADDING ONLY WATER)	POINT OF PLACEMENT (NOT @ TRUCK)	REPORT-24 HRS VERBAL-TIME OF TEST
	SLUMP			
	AIR CONTENT			
	TEMPERATURE			
	COMP. STRENGTH			7 & 28 DAYS
ARCHITECTURAL & CIVIL CONCRETE	SAMPLING	1 MINIMUM PER PLACEMENT, PER DAY (1-25 C.Y.), 1 EVERY 100 C.Y. THEREAFTER.	POINT OF PLACEMENT OR TRUCK CHUTE	REPORT-24 HRS VERBAL-TIME OF TEST
	SLUMP			
	AIR CONTENT			
	TEMPERATURE			
	COMP. STRENGTH			7 & 28 DAYS
STRUCTURAL GROUT (BASEPLATES, CMU, ETC.)	SAMPLING	1 PER PLACEMENT, PER DAY	BATCH POINT (ENSURE BATCH CONFORMS TO MFR SPECS)	REPORT-24 HRS VERBAL-TIME OF TEST
	SLUMP			
	AIR CONTENT			
	TEMPERATURE			
	COMP. STRENGTH			7 & 28 DAYS

AC PAVING	GRADATION	1 PER PLACEMENT, PER DAY AND EVERY 700 TONS THEREAFTER.	BEHIND PAVER & PRIOR TO COMPACTION	REPORT-24 HRS VERBAL-TIME OF TEST OR OBSERVATION
	CONTENT		AFTER FINAL ROLL	
	COMPACTION/DENSITY	1 PER 5000 S.F.	DURING PLACEMENT	
	VISUAL	OBSERVE & DOCUMENT DEPTH, AGGREGATE SIZE, VOIDS IN AGGREGATE, OIL POOLING, ETC. VERIFY BATCH TICKET MIX DESIGN & PROJECT		
<p>CONTRACTOR IS RESPONSIBLE FOR ALL COSTS INCURRED FOR RETESTS, REINSPECTIONS, REPLACEMENT OF NON-CONFORMING PRODUCTS. OWNER EMPLOYED SPECIAL INSPECTION VERIFICATION AND TESTING IS IN ADDITION TO THE CONTRACTOR'S QUALITY CONTROL TESTING. SPECIAL INSPECTION IN NO WAY DIMINISHES OR REDUCES THE CONTRACTOR'S QUALITY CONTROL OBLIGATIONS.</p>				

1.06 CONTROL

- A. Contractor Quality Control is the means by which the Contractor ensures that the construction, to include that of subcontractors and suppliers, complies with the requirements of the contract. At least two phases of control shall be conducted by the CQC Manager for each definable feature of work as follows:
1. Preparatory Phase: This phase shall be performed prior to beginning work on each definable feature of work, after all required plans/documents/materials are approved, and after copies are at the work site. This phase shall include:
    - a. A review of each paragraph of applicable specifications, reference codes, and standards. A copy of those sections of referenced codes and standards applicable to that portion of the work to be accomplished in the field shall be made available by the Contractor at the preparatory inspection. These copies shall be maintained in the field and available for use by the Owner until final acceptance of the work.
    - b. A review of the contract drawings.
    - c. A check to assure that all materials and/or equipment have been tested, submitted, and approved.
    - d. Review of provisions that have been made to provide required control inspection and testing.
    - e. Examination of the work area to assure that all required preliminary work has been completed and is in compliance with the contract.
    - f. A physical examination of required materials, equipment, and sample work to assure that they are on hand, conform to approved shop drawings or submitted data, and are properly stored.
    - g. Discussion of procedures for controlling quality of the work including repetitive deficiencies. Documentation of construction tolerances and workmanship standards for that feature of work.
    - h. A check to ensure that the portion of the plan for the work to be performed has been accepted by the Project Manager.
    - i. Discussion of the initial control phase.

- j. The Owner shall be notified at least 48 hours in advance of beginning the preparatory control phase. This phase shall include a meeting conducted by the CQC Manager and attended by the Superintendent, other CQC personnel (as applicable), and the foreman responsible for the definable feature. The results of the preparatory phase actions shall be documented by separate minutes prepared by the CQC Manager and attached to the daily CQC report. The Contractor shall instruct applicable workers as to the acceptable level of workmanship required in order to meet contract specifications.
2. Follow-up Phase: Daily checks shall be performed to assure control activities, including control testing, are providing continued compliance with contract requirements, until completion of the particular feature of work. The checks shall be made a matter of record in the CQC documentation. Final follow-up checks shall be conducted, and all deficiencies corrected prior to the start of additional features of work which may be affected by the deficient work. The Contractor shall not build upon nor conceal non-conforming work.

#### 1.07 TESTS

- A. Testing Procedure: The Contractor shall provide inspections, tests, and similar quality control services, specified in individual Specification Sections, and required by governing authorities, (Costs for these services shall be included in the Contract Sum). Upon request, the Contractor shall furnish to the Owner duplicate samples of test specimens for possible testing by the Owner. Testing includes operation and/or acceptance tests when specified. The Contractor shall perform the following activities and record and provide the following data:
  1. Verify that testing procedures comply with contract requirements.
  2. Verify that facilities and testing equipment are available and comply with testing standards.
  3. Check test instrument calibration data against certified standards.
  4. Verify that recording forms and test identification control number system, including all of the test documentation requirements, have been prepared.
  5. Results of all tests taken, both passing and failing, shall be recorded on the CQC report for the date taken. Specification paragraph reference, location where tests were taken, and the sequential control number identifying the test shall be given. If approved by the Project Manager, actual test reports may be submitted later with a reference to the test number and date taken. An information copy of tests performed by an offsite or commercial test facility shall be provided directly to the Project Manager. Failure to submit timely test reports as stated may result in nonpayment for related work performed and disapproval of the test facility for this contract.
- B. Retesting: The Contractor is responsible for retesting where results of required inspections, tests, or similar services prove unsatisfactory and do not indicate compliance with Contract Document requirements, regardless of whether the original test was the Contractor's responsibility. Cost of retesting construction revised or replaced by the Contractor is the Contractor's responsibility, where required tests were performed on original construction.
- C. Associated Services: The Contractor shall cooperate with agencies performing required inspections, tests, and similar services and provide reasonable auxiliary services as requested. Notify the agency sufficiently in advance of operations to permit assignment of personnel.

Auxiliary services required include but are not limited to:

1. Providing access to the Work, approved plans, and furnishing incidental labor and facilities necessary to facilitate inspections and tests.
  2. Providing facilities for storage of all special inspection reports at the Project site and make available for review by the authorities having jurisdiction.
  3. Taking adequate quantities of representative samples of materials that require testing or assisting the agency in taking samples.
  4. Providing facilities for storage and curing of test samples, and delivery of samples to testing laboratories.
  5. Providing the agency with a preliminary design mix proposed for use for materials mixes that require control by the testing agency.
  6. Security and protection of samples and test equipment at the Project site.
- D. Correction of Work: The Contractor shall bear all costs of correcting all Work identified as defective or as failing to conform to the Contract Documents, including any additional Owner Inspection Costs, and additional compensation for the Architect's and/or Project Manager's additional services made necessary thereby.
- E. Qualification for Laboratory Agencies: Engage inspection and testing service agencies, including independent testing laboratories free of conflict on interests with the General Contractor, which are prequalified as complying with "Recommended Requirements for Independent Laboratory Qualification" by the American Council of Independent Laboratories, and which specialize in the types of inspections and testing to be performed.
1. Each independent inspection and testing agency engaged on the Project shall be authorized by the authorities having jurisdiction to operate in the State of Alaska and the Municipality of Anchorage.
  2. The Owner reserves the right to direct the specific location or area of work to be tested in accordance with contract requirements.

#### 1.08 SPECIAL INSPECTIONS

- A. The Owner will provide Special Inspections, tests, and similar quality control services as identified in Section 01420, "Special Inspections". Costs for the Special Inspection services are not included in the Contract Sum.
- B. Duties of the Testing Agency: The independent testing agency engaged to perform inspections, sampling, and testing of materials and construction specified in individual Specification Sections shall cooperate with the Owner's Representative and Contractor in performance of its duties and shall provide qualified personnel to perform required inspections and tests.
1. The agency shall notify the Project Manager, and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
  2. The agency is not authorized to release, revoke, alter, or enlarge requirements of the Contract Documents, or approve or accept any portion of the Work.
  3. Special Inspection agency shall not perform any duties of the Contractor, nor be under contract to perform testing services required of the Contractor.
- C. Coordination: The Contractor and each agency engaged to perform inspections, tests, and similar services shall coordinate the sequence of activities to accommodate required services. In addition, the Contractor and each agency shall coordinate activities to avoid the necessity

of removing and replacing construction to accommodate inspections and tests.

1. The Contractor is responsible for scheduling times for inspections, tests, taking samples, and similar activities.
2. The Contractor shall notify the Owner's Special Inspectors, and the Owner, in writing 72 hours prior to required special inspection and coordinate with these inspectors so there are no additional project costs, schedule impacts or delays. The Contractor shall also be responsible to coordinate with the special inspectors and the Owner to identify on the construction schedule when these inspections shall occur.

#### 1.09 WORKMANSHIP

- A. Comply with industry standards except when more restrictive tolerances or specified requirements indicate more rigid standards or more precise workmanship.
- B. Perform work by persons qualified to produce workmanship of specified quality.
- C. Secure products in place in positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

#### 1.10 MANUFACTURER'S INSTRUCTIONS

- A. Comply with instructions in full detail, including each step in sequence. Should instructions conflict with Contract Documents, request clarification from the Project Manager before proceeding.

#### 1.11 MANUFACTURER'S FIELD SERVICE

- A. When required by individual Specifications Section, submit manufacturer's certificate, signed by responsible officer of the Manufacturer, that products meet or exceed specified requirements.
- B. When required by manufacturer, have manufacturer provide qualified representative to observe field conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable. Manufacturer Field Representative shall make a written report of observations and recommendations to the Project Manager.

#### 1.12 SAMPLE PANELS AND MOCK-UPS

- A. Sample panels and/or mock-ups shall be used to establish uniform level of workmanship and finish color and texture. Accepted sample or mock-up shall serve as minimum standard of quality for subsequent work.
- B. Work on any Section requiring a sample panel or mock-up shall be approved in writing by the Owner.
- C. Sample panels or mock-ups may be requested by the Owner even though not specifically required of Specification Section to clarify level of workmanship, color, or texture.
- D. Tests shall be performed in accordance with Section 01410 and this section.

### 1.13 OBSERVATION

The following stages of construction specifically require observation by the Architect, Owner, and other Authorities having jurisdiction. Provide the indicated notice to the Project Manager prior to commencing work on the phase or upon completion as appropriate:

A. Stages that require two day notice include:

1. Completion of utility trench excavation prior to placement of bedding.
2. Completion of utility pipe installation prior to backfill.
3. Completion of subdrain system's drainage mat and perforated pipe prior to backfill.
4. Completion of driveway, parking lot and sidewalk excavation, installation of geotextile fabric and backfill prior to placement of pavement.
5. Completion of asphalt concrete pavement placement.
6. Completion of portland cement concrete pavement placement.
7. Completion of building excavation, geotextile fabric installation, and backfill prior to placement of concrete floor slab.
8. Completion of excavation forming prior to concrete placement.
9. Completion of concrete masonry, as damp-proofing work is beginning.
10. Wall framing and sheathing completed, observation of shear wall fastening and connections.
11. Mechanical and electrical rough-in and wall blocking, prior to cover.
12. Insulation and vapor barrier installation prior to cover, observation required as work progresses, notify as phases are complete.
13. Completion of mock-ups and finishes as mock-ups and areas are completed.
14. Prior to beginning roofing.

B. Stages that require five day notice include:

1. Substantial Completion.
2. Operational instructions.
3. Final Completion.

### 1.14 COMPLETION INSPECTION

A. Punch-Out Inspection: Near the end of the work, or any increment of the work established by a time stated in the specifications, the CQC Manager shall conduct an inspection of the work. A punch list of items which do not conform to the approved drawings and specifications shall be prepared and included in the CQC documentation, as required by Section 01400, paragraph 1.15 A.4. The list of deficiencies shall include the estimated date by which the deficiencies will be corrected. The CQC Manager or staff shall make a second inspection to ascertain that all deficiencies have been corrected. Once this is accomplished, the Contractor shall notify the Owner that the facility is ready for the Owner Substantial inspection.

B. Final Inspection: The Contractor's Quality Control Inspection personnel shall be in attendance at the final inspection.

### 1.15 DOCUMENTATION

A. The Contractor shall maintain current records providing factual evidence that required quality control activities and/or tests have been performed. These records shall include the work of subcontractors and suppliers and shall be on an acceptable form that includes, as a minimum, the following information:

1. Contractor/Subcontractor and area of responsibility.
  2. Operating equipment with hours worked, idle, or down for repair.
  3. Work performed each day, giving location, description, and by whom.
  4. Test and/or control activities performed with results and references to specifications/drawings requirements. The control phase shall be identified. List of deficiencies noted, along with corrective action.
  5. Quantity of materials received at the site with statement as to acceptability, storage, and reference to specifications/drawing requirements.
  6. Offsite surveillance activities, including actions taken.
  7. Instructions given/received and conflicts in plans and/or specifications.
  8. Any other remarks impacting quality control.
  9. Contractor's verification statement.
- B. These records shall indicate a description of trades working on the project; the number of personnel working; weather conditions encountered; and any delays encountered. These records shall cover both conforming and deficient features and shall include a statement that equipment and materials incorporated in the work and workmanship comply with the contract. The original and one copy of these records in report form shall be furnished to the Owner on a weekly basis within 24 hours after the date covered by the report, except that reports need not be submitted for days on which no work is performed. As a minimum, one report shall be prepared and submitted for every 7 days of no work and on the last day of a no work period. All calendar days shall be accounted for throughout the life of the contract. Reports shall be signed and dated by the CQC Manager. The report from the CQC Manager shall include copies of test reports and copies of reports prepared by all subordinate quality control personnel.

#### 1.16 NOTIFICATION OF NONCOMPLIANCE

- A. The Project Manager will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Project Manager may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No part of the time lost due to such stop orders shall be made the subject of claim for extension of time or for excess costs or damages by the Contractor.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION



## TESTING LABORATORY SERVICES

## PART 1. GENERAL

## 1.01 REQUIREMENTS INCLUDED

- A. Contractor will employ and pay for the services of an independent testing laboratory, free of conflict of interests with the General Contractor, to perform specified testing.
- B. Employment of the laboratory shall in no way relieve Contractor's obligations to perform the work of the contract.
- C. Inspection, sampling and testing required as called for in the following technical sections.
- D. The Contractor shall pay for re-inspections and re-testing required because of defective work or ill-timed notices.

## 1.02 RELATED REQUIREMENTS

- A. Article 7.7, Section 00700 - General Conditions.
- B. Inspections and testing required by laws, ordinances, rules, regulations, orders, project Contract Documents, or approvals of public authorities.
- C. Certification of Products: Respective Sections of Specifications.
- D. Test, Adjust, and Balance of Equipment: Respective Sections of Specifications.
- E. Each Specification Section Listed: Laboratory test required, and standards for testing.

## 1.03 QUALIFICATIONS OF LABORATORY

- A. Independent laboratory acceptable to Owner, Architect and Building Official.
- B. Meet "Recommended Requirements for Independent Laboratory Qualification" latest edition, published by American Council of Independent Laboratories, 1300 "I" Street N.W., Washington, D.C. 20005.
- C. Meet ASTM E-329 latest edition, "Standards of Recommended Practice for Inspection and Testing Agencies for Concrete and Steel as used in Construction."

## 1.04 LABORATORY'S DUTIES

- A. Laboratory authorized to operate in Alaska, with a full-time engineer registered in Alaska on staff to review services.
- B. Ascertain and certify compliance with Contract Documents.
- C. Promptly submit, unless otherwise indicated, written Inspection and Test Report to each of the following within forty-eight hours of inspection:
  - 1. Owner: Two (2) copies
  - 2. Architect: Two (2) copies
  - 3. Contractor: Two (2) copies or as required

## D. Include the following on Test Reports:

1. Date issued.
2. Project title and location.
3. Testing Laboratory name and address.
4. Inspector's name.
5. Date of inspection or sampling.
6. Record of temperature and weather.
7. Date of test.
8. Identification of product tested.
9. Test location in Project.
10. Type of inspection or test.
11. Observations regarding compliance with Contract Documents.

## E. Laboratory is not authorized to:

1. Release, revoke, alter, or enlarge on Contract Document requirements.
2. Approve or accept any portion of work.
3. Assume any duties of Contractor.
4. Stop Work.

## 1.05 CONTRACTOR'S DUTIES

- A. Cooperate with laboratory personnel, provide access to work, and to Manufacturer's operations.
- B. Secure and deliver to the laboratory adequate quantities of representation samples of materials proposed to be used and which require testing.
- C. Provide to the laboratory the preliminary design mix proposed to be used for concrete, and other materials mixes which require control by the testing laboratory.
- D. Furnish copies of products test reports as required.
- E. Furnish incidental labor and facilities:
  1. To provide access to work to be tested.
  2. To obtain and handle samples at the project site or at the source of the project to be tested.
  3. To facilitate inspections and tests.
  4. For storage and curing of test samples.
- F. Notify laboratory sufficiently in advance of operations to allow for laboratory assignment of personnel and scheduling of tests. Twenty-four hour minimum notification.
  1. When tests or inspections cannot be performed after such notice, reimburse Owner for laboratory personnel and travel expenses incurred due to Contractor's negligence.
- G. Notify Architect and Owner a minimum twenty-four hours in advance of any testing.
- H. Repair test holes to match original conditions.
- I. Quality Control is the responsibility of the General Contractor. The General Contractor should employ a testing firm to provide testing as required to monitor and maintain his own quality control program, as well as satisfy the specific requirements of the Contract Documents.

1.06 OWNER'S TESTING LABORATORY SERVICES

- A. The Owner may also employ and pay for the services of an Independent Testing Laboratory to perform specified testing as indicated in the Supplementary General Conditions and in this section. This testing service will be employed for Quality Assurance Only. QUALITY CONTROL IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
- B. The Contractor shall cooperate with the Owner's laboratory to facilitate the execution of its services.
- C. A copy of the Owner's laboratory written report of each test will be distributed to the Contractor.
- D. When initial tests indicate work does not comply with the Contract Document, all additional tests required, until tests pass, shall be at the expense of the Contractor.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION



SPECIAL INSPECTIONS

PART 1. GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Purpose
- B. Types of Work
- C. Owner Responsibilities
- D. Engineer or Architect of Record Responsibilities
- E. Contractor Responsibilities
- F. Special Inspector Responsibilities

1.02 RELATED REQUIREMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division - 1 Specification Sections, apply to this Section.
  - 1. Section 00700 - General Conditions and Section 00800 – Supplemental Conditions of the Construction Contract.
  - 2. Section 01090 - Reference Specifications and Standards
  - 3. Section 01300 - Submittals
  - 4. Section 01400 - Quality Control Services

1.03 REFERENCES

- A. International Building Code (IBC) - SECTION 1704 - SPECIAL INSPECTIONS
- B. Uniform Administrative Code (UAC) - SECTION 306 - SPECIAL INSPECTIONS

1.04 PURPOSE OF SPECIAL INSPECTIONS

- A. In accordance with IBC Section 1704.1 General "In addition to the inspections required by Section 109, the owner or the engineer or architect of record acting as the Owner's agent shall employ one or more special inspectors who shall provide inspections during construction on the types of work listed under 1704."

1.05 TYPES OF WORK

- A. Except as provided in IBC Section 1704, the types of work listed below shall be inspected by a Special Inspector.
  - 1. Concrete.
  - 2. Bolts installed in concrete.
  - 3. Reinforcing steel in concrete.
  - 4. Structural welding.
  - 5. High-strength bolting.
  - 6. Structural masonry.
  - 7. Spray-applied fireproofing.
  - 8. Special grading, excavation, and filling.

- B. Continuous and Periodic Special Inspection and Approved Fabricators shall be a part of the Special Inspection requirements.

#### 1.06 OWNER RESPONSIBILITIES

- A. The Owner or the Engineer or Architect of Record acting as the Owner's agent shall employ one or more Special Inspectors who shall provide inspections during construction on the types of work listed.
- B. The Owner shall be responsible for providing a full set of drawings and specifications to each Special Inspector.

#### 1.07 ENGINEER OR ARCHITECT OF RECORD

- A. The Engineer or Architect of Record, under the Owner's direction, may be required to employ one or more Special Inspectors who shall provide inspections during construction on the types of work listed under IBC Section 1704.
- B. The Engineer or Architect of Record, under the Owner's direction, may be responsible for coordinating the Pre-Construction Meeting, with the Contractor, to include Special Inspectors for the purpose of reviewing the Special Inspection Program and responsibilities of each member.
- C. The Engineer or Architect of Record is responsible for clearly indicating the design parameters and material selection on the project plans and/or specifications.
- D. The Engineer or Architect of Record shall determine when and where Special Inspection is necessary in order to meet requirements of the Code.
- E. It shall be the responsibility of the Architect or Engineer of Record to prepare a typewritten Special Inspection Program for submittal to the Building Official for review and approval (UAC 302.5). Such approval shall be obtained prior to issuance of a Building Permit.
- F. Design changes required to correct non-conforming work already incorporated into the completed construction, shall be identified to the Building Official for review and approval as a Change Order. Such Changes shall be generated by the Engineer or Architect of Record.

#### 1.08 CONTRACTOR RESPONSIBILITIES

- A. The Contractor shall be responsible for calling a Pre-Construction meeting to review Special Inspection requirements as they pertain to the project. Attendees shall include the Contractor's Construction Supervisor, ASD Project Manager, the Engineer or Architect of Record, the Building Safety Division Inspector assigned to the project, all Special Inspectors, and any subcontractors who will actually be constructing items requiring Special Inspection. This meeting shall not be considered a substitute for any pre-construction meeting held between the Contractor and the Owner and Engineer or Architect of Record although they may coincide.
- B. The Contractor shall be responsible for notifying the Special Inspector or special inspection firm regarding required special inspections. Notice shall be a minimum of 24 hours in advance.
- C. The Contractor shall have on site at all times, an approved set of plans and construction documents available to the Special Inspector for the purpose of reference or clarification.

- D. The Contractor shall be responsible for retaining, on site, a copy of all Special Inspection records submitted by the Special Inspector.

1.09 SPECIAL INSPECTOR RESPONSIBILITIES

- A. The Special Inspector shall observe the work assigned for conformance with the approved design drawings and specifications.
- B. Special Inspectors requiring certification by an agency such as ICBO, ACI, or AWS shall carry current certification with them while performing the Work on site.
- C. The Special Inspector shall remain on site at all times when work requiring Special Inspection is in progress.
- D. The Special Inspector shall immediately bring all nonconforming items of work or material to the immediate attention of the Contractor for correction.
- E. The Special Inspector or Inspection Firm shall submit required written reports to the Building Official (two copies), the Owner, and the Engineer or Architect of Record within 48 hours of inspection.
- F. Special Inspectors or Inspection Firms shall submit a final signed report to the Building Safety Division stating that all items requiring Special Inspection were, to the best of their knowledge, in conformance with the approved design drawings, specifications, approved change orders and the applicable workmanship provided in the International Building Code. Items not in conformance, unresolved items, and any discrepancies in inspection coverage shall be specifically itemized in the final report.
- G. Special Inspectors shall meet all certification requirements stated in the Special Inspection Program and required by the Municipality of Anchorage Building Safety Division and shall maintain certification at all times throughout the project.

END OF SECTION



## STRUCTURAL OBSERVATION

## PART 1. GENERAL

## 1.01 REQUIREMENT INCLUDED

- A. Purpose
- B. Types of Work
- C. Owner Responsibilities
- D. Engineer or Architect of Record Responsibilities
- E. Contractor Responsibilities
- F. Structural Observer Responsibilities

## 1.02 REFERENCES

- A. International Building Code (IBC)–Section 1709 STRUCTURAL OBSERVATION.

## 1.03 PURPOSE OF STRUCTURAL OBSERVATION

- A. In accordance with IBC Section 1709, the purpose of Structural Observation is as defined in IBC Section 1702.1: Visual observation of the structural system, for general conformance to the approved plans and specifications, at significant construction stages and at completion of structural system. Structural Observation does not include or waive the responsibility for the inspections required by other sections of the IBC.

## 1.04 TYPES OF WORK

- A. The Design Structural Engineer or another engineer designated by the Design Structural engineer shall perform Structural Observation.
- B. Observed deficiencies shall be reported in writing to the Owner's Representative, Special Inspector, Contractor, and the Building Official.
- C. The Structural Observer shall submit to the Building Official a written statement that the site visits have been made and identifying any reported deficiencies that, to the best of the Structural Observer's knowledge, have not been resolved.

## 1.05 OWNER'S RESPONSIBILITIES

- A. The Owner or the Engineer or Architect of Record acting as the Owner's Agent shall employ one or more Structural Observers who shall provide structural observation during construction on the types of work identified under IBC Section 1709.

## 1.06 ENGINEER OR ARCHITECT OF RECORD

- A. The Engineer or Architect of Record, under the Owner's direction, may be required to employ one or more Structural Observers who shall provide inspections during construction on the types of work defined under IBC Section 1709.

- B. The Engineer or Architect of Record, under the Owner's direction, with the Structural Observer, will review with the Contractor the Structural Observer Program and responsibilities of each member.
- C. The Engineer or Architect of Record is responsible for clearly indicating the design parameters and material selection on the project plans and/or specifications.
- D. The Engineer or Architect of Record shall determine when and where Structural Observation is necessary in order to meet requirements of the Code.
- E. Design changes required to correct non-conforming work already incorporated into the completed construction, shall be identified to the Building Official for review and formal approval. Such changes shall be generated by the Engineer or Architect of Record.

#### 1.07 CONTRACTOR RESPONSIBILITIES

- A. The Contractor shall be responsible for calling a Structural Observation Organizational meeting to review the Structural Observation requirements as they pertain to the project. Attendees shall include the Contractor's Construction Supervisor, ASD Project Manager, the Engineer or Architect of Record, the Building Safety Division Inspector assigned to the project, all Structural Observers, and any subcontractors who will actually be constructing items requiring Structural Observation. This meeting shall not be considered a substitute for any pre-construction meeting held between the Contractor and the Owner and Engineer or Architect of Record although they may coincide.
- B. The Contractor shall have on site at all times, an approved set of plans and construction documents available to the Structural Observer for the purpose of reference or clarification.
- C. The Contractor shall be responsible for retaining, on site, a copy of all Structural Observation records submitted by the Structural Observer.

#### 1.08 STRUCTURAL OBSERVER RESPONSIBILITIES

- A. The Structural Observer shall observe the work assigned for conformance with the approved design drawings and specifications.
- B. The Structural Observer shall remain on site at all times when work requiring Structural Observation is in progress.
- C. The Structural Observer shall immediately bring all nonconforming items of work or material to the immediate attention of the Contractor for correction.
- D. The Structural Observer shall submit required written reports to the Building Official (two copies), the Owner, and the Engineer or Architect of Record within 48 hours of inspection.
- E. The Structural Observers shall submit a final signed report to the Building Safety Division stating that all items requiring Structural Observation were, to the best of their knowledge, in conformance with the approved design drawings, specifications, approved change orders and the applicable workmanship provided in the International Building Code. Items not in conformance, unresolved items, and any discrepancies in inspection coverage shall be specifically itemized in the final report.

END OF SECTION

MAINTENANCE OF TRAFFIC

PART 1. GENERAL

1.01 DESCRIPTION OF WORK

- A. When working adjacent to school playgrounds, provide flagmen. Payment for such flagging and protective flagmen services shall be borne by Contractor.
- B. Contractor shall retain responsibility for traffic operations and protective measures to assure safe flow of traffic. Contractor shall cooperate with Owner so that traffic flow is minimally impeded by execution of work under this Contract.

1.02 SUBMITTALS

- A. Prior to starting any work, Contractor shall submit to the Authority having Jurisdiction and the Project Manager, detailed plan of his proposed method for controlling traffic at each affected location. Proposed traffic control plan shall show and describe proposed locations and time durations covering the following:
  - 1. Vehicular traffic routing including School Buses.
  - 2. Traffic blockage anticipated to be caused by work under this contract.
  - 3. Address conflicts between Pedestrian and vehicular traffic.

1.03 TRAFFIC MAINTENANCE FACILITIES

- A. Other than as shown on approved traffic control plans, at no time shall Contractor's operations interfere with safe and orderly operation of school. Encroachment by Contractor's operations will not be permitted.
- B. For duration of Contract, Contractor shall immediately repair or replace any and all appurtenances damaged or destroyed in performance of work included herein.
- C. Upon completion of work, temporary traffic maintenance items furnished by Contractor shall remain his property and shall be removed from site by Contractor.
- D. Contractor shall utilize dust control methods to control dust on access streets and project site to satisfaction of the Project Manager.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION



PROJECT SIGN

PART 1. GENERAL

1.01 DESCRIPTION OF WORK

- A. Furnish, install, and maintain project identification sign.
- B. Project sign must be approved and permitted, prior to erections. Allow no other signs to be displayed.

1.02 PROJECT IDENTIFICATION

- A. Painted sign of 32 sf. area with painted graphic, or printed vinyl sign, content to include:
  - 1. Title of project
  - 2. Name of Owner.
  - 3. Names of professional consultants
  - 4. Prime contractor.
  - 5. Major subcontractors.
  - 6. An area 18" square for Owner logo.
- B. Graphic design, style of lettering, and colors: As shown in this section.
- C. Erect on the site at a lighted location of high public visibility as approved by Project Manager.

1.03 QUALITY ASSURANCE

- A. Sign Painter: Professional experience in type of work required.
- B. Finishes, Painting: Adequate to resist weathering and fading during scheduled construction period.

PART 2. PRODUCTS

2.01 SIGN MATERIALS

- A. Structure and Framing: may be new or used, wood or metal, in sound condition structurally adequate to work and suitable for specified finish.
- B. Sign Surfaces: Exterior softwood plywood with medium density overlay, standard large sizes to minimize joints. Thickness as required by standards to span framing members, to provide even, smooth surface without waves or buckles.
- C. Rough Hardware: Galvanized.
- D. Paint: Exterior quality semi-gloss Alkyd, as specified in painting specification.
- E. Vinyl Lettering and Graphics may be considered upon submittal to Project Manager.

PART 3. EXECUTION

3.01 PROJECT SIGN

- A. Paint exposed surfaces of supports, framing, and surface material; one coat of primer and one coat of exterior paint.
- B. Paint graphics in styles, sizes and colors selected.

3.02 MAINTENANCE

- A. Maintain sign and supports in a neat, clean condition; repair damages to structure, framing or sign.

3.03 REMOVAL

- A. Remove sign, framing, supports, and foundations at completion of the project.



END OF SECTION



MATERIALS AND EQUIPMENT

PART 1. GENERAL

1.01 DESCRIPTION

- A. Materials and Equipment incorporated into Work shall:
  - 1. Conform to applicable specifications and standards.
  - 2. Comply with size, make, type, and quantity specified, unless otherwise approved in writing.
- B. Manufactured and Fabricated Products:
  - 1. Manufacture like parts of duplicate units to standard size and gauges, and to be interchangeable.
  - 2. Two or more items of same kind shall be identical, and by same Manufacturer.
  - 3. Products shall be suitable for service conditions.
  - 4. Equipment shall comply with capacity, sizes, and dimensions shown or specified, unless otherwise approved in writing.
- C. Do not use materials or equipment for any purpose other than that for which designed or specified.

1.02 RELATED REQUIREMENTS

- A. Section 01010: Summary of Work
- B. Section 01340: Shop Drawing, Product Data, and Samples.
- C. Section 01630: Substitution and Product Option
- D. Section 01710: Cleaning

1.03 CONTRACTOR'S OPTIONS

- A. For products specified only by reference standard, select any product meeting standard.
- B. For products specified by naming several products, select any of such products.
- C. For products specified by naming one or more products and "or approved", select any one specified product or submit request for substitution as specified.

1.04 INAPPROPRIATE PRODUCTS AND METHODS

- A. If Contractor believes that any specified product, method, or system is inappropriate for use, he shall, if possible, so notify the Project Manager at least ten (10) working days prior to bid opening, and if not possible, such notice shall be given before performing work in question. If notice of objection is not received within the specified time limits, it will be assumed that Contractor agrees that specified products, methods, and systems are not inappropriate for use.
- B. No asbestos containing materials are to be incorporated into the project. Certification signed by the General Contractor shall state that Asbestos Containing materials have not been installed under this project. Turn certification in to Project Manager no later than first payment application submittal. Recertify to Owner at substantial completion inspection.

1.05 PRODUCT SUBSTITUTIONS

- A. Refer to Section 01630.

1.06 NUMBER OF PRODUCTS REQUIRED

- A. Whenever in specifications a product is referred to in singular number, such reference shall include as many such products as are shown on Drawings are required to complete the Work.

1.07 PRODUCTS LIST

- A. Submit to Project Manager complete list of major products proposed for use; Specification Section, include proprietary product name, manufacturer's name, and installing Subcontractor's name in accordance with requirement of Section 01340 Shop Drawing, Product Data and Samples.

1.08 MANUFACTURER'S INSTRUCTIONS

- A. Perform work in accordance with Manufacturer's instructions.
- B. Do not omit preparatory or installation procedures required by Manufacturer, unless specifically modified by Contractor Documents.
- C. When Contract Documents require Work to comply with Manufacturer's instruction, obtain and distribute such instructions to parties performing work, including copies to Architect and Project Manager. Maintain one set at job site during installation and until acceptance.
- D. Handle, install, connect, clean, condition, and adjust products in strict accord with such instructions and in conformance with specified requirements.
- E. Should job conditions or specified requirements conflict with Manufacturer's instructions, consult Project Manager for further instructions.
- F. Do not proceed with work without clear instructions.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION

## DELIVERY, STORAGE, AND HANDLING

## PART 1. GENERAL

## 1.01 DESCRIPTION OF WORK

- A. Provide for expeditious transportation and delivery of products to project site undamaged, on schedule to avoid delay of the Work.
- B. Providing equipment and personnel at site to unload and handle products in manner to avoid damage to products.
- C. Provide secure storage and protection for products to be incorporated into the Work, and maintenance and protection for products after installation and until completion of the Work.

## 1.02 DELIVERY

- A. Arrange deliveries of products in accord with construction schedules and in ample time to facilitate inspection prior to installation.
- B. Coordinate deliveries to avoid conflict with work and conditions at site. Contractor deliveries must not conflict with:
  - 1. Work of other Contractors, or Owner.
  - 2. Limitations of storage space.
  - 3. Availability of equipment and personnel for handling products.
  - 4. Owner's use of premises.
- C. Deliver products in undamaged condition in original containers or packaging, with identifying labels intact and legible.
- D. Partial deliveries of component parts of equipment shall be clearly marked to identify equipment, to permit easy accumulation of parts and to facilitate assembly.
- E. Immediately upon delivery, inspect shipment to assure:
  - 1. Product complies with requirements of contract documents and reviewed submittals.
  - 2. Quantities are correct.
  - 3. Containers and packages are intact, labels are legible.
  - 4. Products are protected and undamaged. Minor damages may be repaired, provided finish items are equivalent in all respects to new work.

## 1.03 PRODUCT HANDLING

- A. Provide equipment and personnel necessary to handle products, including those provided by Owner, by methods to prevent soiling or damage to products or packaging.
- B. Provide additional protection during handling as necessary to prevent scraping, marring, or otherwise damaging products or surrounding surfaces.
- C. Handle products by methods to prevent bending or over-stressing.
- D. Lift heavy components only at designated lifting points.

#### 1.04 STORAGE

- A. Store products immediately on delivery and protect until installed in the Work. Store in accord with manufacturer's instructions, with seals and labels intact and legible.
- B. Store products subject to damage by elements in substantial weather-tight enclosures.
  - 1. Maintain temperatures with ranges required by manufacturer's instructions.
  - 2. Provide humidity control for sensitive products, as required by manufacturer's instructions.
  - 3. Store unpacked products on shelves, in bins, or in neat piles, accessible for inspection.
- C. Exterior Storage
  - 1. Provide substantial platforms, blocking, or skids to support fabricated products 4" above ground, prevent soiling or staining.
  - 2. Cover products, subject to discoloration or deterioration from exposure to elements, with impervious sheet coverings. Avoid use of non-vented plastic or canvas shelters which could create humidity chambers. Provide adequate ventilation to avoid condensation.
  - 3. Store loose granular materials in solid surfaces such as paved areas or provide plywood or sheet materials to prevent mixing with foreign matter.
    - a. Provide surface drainage to prevent flow or ponding of rainwater.
    - b. Prevent mixing of refuse or chemically injurious materials or liquids.
  - 4. Provide exterior storage area within Contractor Secure area.
- D. Arrange storage in manner to provide easy access for inspection.

#### 1.05 MAINTENANCE OF STORAGE

- A. Maintain periodic system of inspection of stored products on scheduled basis to assure that:
  - 1. State of storage facilities is adequate to provide required conditions.
  - 2. Required environmental conditions are maintained on continuing basis.
  - 3. Surfaces of products exposed to elements are not adversely affected. Any weathering of products, coatings, and finishes is not acceptable under requirements of contract documents.
- B. Mechanical and electrical equipment which requires servicing during long-term storage shall have complete manufacturer's instructions for servicing accompanying each item, with notice of enclosed instructions shown on exterior of package.

#### 1.06 PROTECTION AFTER INSTALLATION

- A. Provide protection of installed products to prevent damage from subsequent operations, usage or vandalism. Remove when no longer needed, prior to completion of work.
- B. Control traffic to prevent damage to equipment and surfaces.
- C. Provide coverings to protect finished surfaces from damage.
  - 1. Cover projections, wall corners, jambs, sills, and soffits of openings, in areas used for traffic and for passage of products in subsequent work.

2. Protect finished floors and stairs from dirt and damage.
  - a. In areas subject to foot traffic, secure heavy paper, sheet goods, and other materials in place.
  - b. For movement of heavy products, lay planking or similar materials in place.
  - c. For storage of product, lay tight wood sheathing in place.
  
- D. Waterproofed and Roofing Surfaces
  1. Prohibit use of surface for traffic and any kind, or for storage of any products.
  2. When some activity must take place in order to carry out Contract, obtain recommendations from installer for protection of surface.
    - a. Install recommended protection, remove on completion of that activity.
    - b. Restrict use of adjacent unprotected areas.

#### 1.07 DAMAGED PRODUCTS

- A. Remove damaged or deteriorated materials from the premises. Replace materials which have been damaged.

#### PART 2. PRODUCTS (NOT USED)

#### PART 3. EXECUTION (NOT USED)

END OF SECTION



SUBSTITUTION AND PRODUCT OPTION

PART 1. GENERAL

1.01 RELATED DOCUMENTS

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

1.02 DESCRIPTION OF WORK

- A. Contractor's options in selection of products.
- B. Requests for substitution of products.

1.03 RELATED REQUIREMENTS

- A. Section 00100 - Instruction to Bidders.
- B. Section 00700 and 00800 - General Conditions and Supplementary General Conditions.
- C. Section 01340 - Shop Drawings, Product Data and Samples.

1.04 CONTRACTOR'S OPTIONS

- A. Reference to any equipment, material, article, or patented process by trade name, make or catalog number shall be regarded as establishing a standard of quality and characteristics of products that will be satisfactory and shall not be construed as limiting competition.
- B. Whether or not specifically named equipment or material is followed by the term "equivalent" or "equivalent product" or "approved equal", it shall not exclude other manufacturer's equipment or materials from consideration, unless "NO SUBSTITUTIONS" called out in the specification sections. In this usage, the terms "equivalent" and "equal" or "approved equal" are interchangeable though a product or method considered for substitution may be equivalent to a specified product or method without actually being equal, by virtue of performance, appearance, and meeting specified or implied criteria.
- C. No item will be considered for substitution prior to the bid opening. Consequently, the Bidder shall make its own determination if a substituted item will be equivalent to or better than that specified or indicated in regard to quality, workmanship, finish, space requirements, electrical requirements, performance and guarantees or warranties. Any change in bid and/or contract amount due to any subsequent rejection of product found "not equivalent" will not be considered.
- D. After the Notice to Proceed the Contractor shall submit sufficient data in accordance with this Section to establish equality. The Owner's Representative shall be the sole judge of equality and acceptability.
- E. Acceptance of substitute materials will not relieve the Contractor of the responsibility for any changes in the Contractor's own work or in the work of other trades caused by the substitution. Any additional costs resulting from substitutions are the responsibility of the Contractor.

1.05 SUBSTITUTION PROCEDURE

- A. Requests for substitutions of products will be considered only within 90 calendar days after Notice to Proceed. Subsequent requests will be considered only when judged to be in the best interest of the Owner.
- B. Substitutions will not be considered when indicated on shop drawings or product data submittals without separate formal request, when requested directly by subcontractor or

supplier, or when acceptance will require substantial revision of Contract Documents.

- C. Substitute products shall not be ordered or delivered without written acceptance.
- D. Submit separate request for each substitution. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.
- E. Identify products by specifications section and article numbers. Provide manufacturer's name and address, trade name of product, and model or catalog number. List fabricators and suppliers as appropriate.
- F. Attach product data as specified in Section 01340 and the following:
  - 1. Give itemized comparison of proposed substitution with specified product and listing variations.
  - 2. Give quality and performance comparison between proposed substitution and specified product.
  - 3. List availability of maintenance services and replacement materials.
  - 4. State effect of substitution on construction schedule, and changes required in other work or products.
- G. If no requests for substitutions have been received within time frame stated above, it will be assumed that construction will proceed with equipment, materials and products called for in Contract Documents.

If this is subsequently found not to be the case, the Owner reserves the right to demand that unapproved item be removed and replaced with specified item.

#### 1.06 CONTRACTOR REPRESENTATION

- A. Request for substitution constitutes a representation that Contractor has investigated proposed product and has determined that it is equal to or superior in all respects to specified product.
- B. Contractor shall provide same warranty or bonds for substitution as for specified product.
- C. Contractor shall coordinate installation of accepted substitute, making such changes as may be required for work to be complete in all respects, specifically including any related redesign costs.
- D. Contractor waives claims for additional cost caused by substitution which may subsequently become apparent.

#### PART 2. PRODUCTS (NOT USED)

#### PART 3. EXECUTION (NOT USED)

END OF SECTION

(Except for "Substitution Request Form," 1 page)

SUBSTITUTION REQUEST FORM

TO: \_\_\_\_\_

PROJECT: \_\_\_\_\_

We hereby submit for your consideration the following product instead of the specified item for the above project:

Section \_\_\_\_\_ Page \_\_\_\_\_ Paragraph \_\_\_\_\_ Specified Item \_\_\_\_\_

Proposed Substitution: \_\_\_\_\_

Attach complete Product description, drawings, photographs, performance and test data, and other information necessary for evaluation.

Will changes be required to building design in order to properly install proposed substitution?  
Yes \_\_\_ No \_\_\_ If Yes, explain: (Add second sheet).

Will the undersigned pay for changes to the building design, including engineering and drawing costs, caused by requested substitution? Yes \_\_\_ No \_\_\_.

What differences exist between proposed substitution and specified item?

Does substitution affect Drawing dimension? Yes \_\_\_ No \_\_\_ If Yes, explain: (Add second sheet.)

What affect does substitution have on other trades?

Does Manufacturer's warranty of proposed substitution differ from that specified?  
Yes \_\_\_ No \_\_\_ If Yes, explain: (Add second sheet.)

Will substitution affect Progress Schedule? Yes \_\_\_ No \_\_\_ If Yes, explain: (Add second sheet.)

Will substitution cost more than specified Product? Yes \_\_\_ No \_\_\_ If Yes, explain: (Add second sheet.)

Do substitutions affect the Commissioning process and checklists included in Division 17? Yes \_\_\_ No \_\_\_ If any, attach a marked-up copy of the appropriate Checklist(s) from Division 17 for Owner's approval.

Will maintenance and service parts be locally available for substitution? Yes \_\_\_ No \_\_\_ If Yes, explain: (Add second sheet.)

Submitted by:  
Signature: \_\_\_\_\_  
Firm: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_  
Date: \_\_\_\_\_

For Owner's Representative's Use Only:  
Accepted ( )      Accepted as Noted ( )  
Not Accepted ( )      Received Too Late ( )  
By: \_\_\_\_\_  
Date: \_\_\_\_\_  
Remarks: \_\_\_\_\_  
Phone: \_\_\_\_\_



## STARTING OF SYSTEMS

## PART 1. PART GENERAL

## 1.01 RELATED DOCUMENTS

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

## 1.02 SECTION INCLUDES

- A. Starting systems.
- B. Demonstration and instructions.
- C. Testing, adjusting, and balancing.

## 1.03 RELATED SECTIONS

- A. Section 01730 - Operation and Maintenance Data.

## 1.04 STARTING SYSTEMS

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Notify Owner seven days prior to start-up of each item.
- C. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, or for other conditions which may cause damage.
- D. Verify that tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- E. Verify wiring and support components for equipment are complete and tested.
- F. Execute start-up under supervision of applicable manufacturer's representative in accordance with manufacturers' instructions.
- G. When specified in individual specification Sections, require manufacturer to provide authorized representative to be present at site to inspect, check, and approve equipment or system installation prior to start-up, and to supervise placing equipment or system in operation.

## 1.05 DEMONSTRATION AND INSTRUCTIONS

- A. Demonstrate operation and maintenance of Products to Owner's personnel two weeks prior to date of Substantial Completion.
- B. In a classroom environment located at the Project site, demonstrate, and provide instruction for the Project equipment by a manufacturer's representative who is knowledgeable about the Project.
- C. For equipment or systems requiring seasonal operation, perform demonstration for other season within nine months.
- D. Utilize operation and maintenance manuals as basis for instruction. Review contents of manual

with Owner's personnel in detail to explain all aspects of operation and maintenance.

- E. Demonstrate start-up, operation, control, adjustment, trouble-shooting, servicing, maintenance, and shutdown of each item of equipment at agreed time, at equipment location.
- F. Prepare and insert additional data in operations and maintenance manuals when need for additional data becomes apparent during instruction.
- G. The amount of time required for instruction on each item of equipment and system is that specified in individual sections.

1.06 TESTING, ADJUSTING, AND BALANCING

- A. The independent firm will perform services specified in Section 01410 and 01651.
- B. Reports will be submitted by the independent firm to the Owner indicating observations and results of tests and indicating compliance or non-compliance with the requirements of the Contract Documents.

PART 2. PART PRODUCTS (NOT USED)

PART 3. PART EXECUTION (NOT USED)

END OF SECTION

## SYSTEM COMMISSIONING

## PART 1 - GENERAL

## 1.01 RELATED DOCUMENTS

- A. Drawings and General Provisions of contract, including General and Supplementary Conditions and other Divisions of these Specifications, apply to work of this section.

## 1.02 DEFINITION

- A. Building Commissioning work is a joint team effort to ensure that all equipment and systems have been completely and properly installed and put into services. The commissioning work will begin only after all systems are 100% complete and functional. The factory start-up of all equipment must have been carried out as well as control system completion and start-up and balancing. The team is made up of representatives from the owner's Engineer and Contractor's organizations.
- B. The Contractor shall schedule system commissioning. The trades represented during the commissioning include sheet metal, piping and fitting, refrigeration, controls and balancing. The lead tradesmen for each trade who actually performed the work is to be present. All trades are to be present as scheduled during the commissioning session. The balancing and control contractors may be released when their portions of work have been completed. The Contractor will submit a schedule of activities for commissioning at least 30 days prior to beginning commissioning. A suggested schedule outline is as follows:
1. Day One (Monday) Owner and Engineer; Mechanical Contractor optional.
  2. Day Two (Tuesday) Owner, Engineer, Balancing Contractor, Control Contractor and Mechanical Contractor.
  3. Day Three (Wednesday) Owner, Engineer, Balancing Contractor, Control Contractor, Mechanical Contractor including Sheet Metal Contractor and Fitter.
  4. Day Four (Thursday) Owner, Engineer, Mechanical Contractor, Sheet Metal Contractor, Fitter and Refrigeration Contractor.
  5. Day Five (Friday) Refrigeration Contractor and all parties from day four to complete tasks not completed previously.

## 1.03 DOCUMENTS

- A. The following documents shall be assembled and bound into the operating and maintenance manuals and delivered according to Section 01730, Maintenance Data.
1. Plumbing sanitization certified.
  2. Certificates of Completion from the following Contractors:
    - a. Sheet Metal
    - b. Plumbing and Piping
    - c. Automatic Temperature Control
    - d. Refrigeration
    - e. Fire Protection
  3. Balancing report including duct pressure test.
  4. Boiler startup certificate, including stack gas test.
  5. Hydronic system water analysis report.
  6. Steam boiler water analysis report.
  7. All operating and maintenance data as described in Section 01730.
- B. Record Drawings will be submitted to District according to Section 01700, Contract

Closeout.

#### 1.04 SCOPE OF WORK

- A. The work included under this section includes a complete and thorough investigation of all systems in order to ensure proper installation and operation of all components and systems. The following systems will be evaluated:
1. Automatic temperature controls.
  2. Instrumentation (gauges, thermometers, etc.)
  3. Air handling equipment.
  4. Air Distribution and exhaust systems.
  5. Boilers.
  6. Hydronic heating and steam distribution systems.
  7. Refrigeration equipment.
  8. Fire protection.
  9. Labeling, marking and color coding.

#### PART 2 - PRODUCTS

##### 2.01 VALVE TAGS

- A. Tag all valves with round, numbered, brass tags. Fasten to valve stem with beaded chain. In boiler room and fan room provide a framed, typewritten directory under glass. Directory shall list all valve tag numbers, service of valve, system valve is located in, location of valve and whether valve is normally open or closed. Provide a separate tag sequence for each service. Each service prefix to be abbreviation used for that service (sprinkles, S-1, S-2, etc.; Air, A-1, A-2, etc.)

##### 2.02 EQUIPMENT LABELS

- A. Label all equipment with heat resistant, laminated plastic labels having engraved lettering 1/2-inch high and fastened in place with rivets, screws or pressure sensitive, double sided tape, on back of label. Examples "Pump P-1," "Water Heater No. 1," "Exhaust Fan Ref-2," Air Handling Unit AHU-1," etc.

##### 2.03 PIPING LABELS

- A. Label all service piping with adhesive backed, flexible, vinyl labels, sealed in clear polyester film. Secure labels with directional flow adhesive vinyl banding tape. Labels and tape to comply with ANSI A13.1-1982 for color and size.
- B. Manufacturer: Baker, Emed, Setmark, Seton.

##### 2.04 WATER TREATMENT CHEMICALS

- A. Obtain the services of a professional water treatment firm for testing the steam boiler water and prescribing the treatment chemicals.
- B. Provide a one-year supply of treatment chemicals to maintain the boiler water at or below the following conditions.
1. Neutralized specific conductance.
  2. Total alkalinity 600 ppm.
  3. Suspended solids 250 ppm.
  4. Silica 90 ppm.

The treatment will include a filming amine additive for protection of the condensate piping.

- C. Supply materials are to be based on boiler operation of 10 hours per week at 50% to 100% of capacity with 50% of condensate being returned to system.

## PART 3 – EXECUTION

### 3.01 SYSTEM COMMISSIONING

- A. The following procedures will be verified during the commissioning process. All procedures are to be checked and carried out by the contractor prior to commissioning.

### 3.02 PRELIMINARY WALK THROUGH

- A. A preliminary walk through to provide a visual check of the various systems to verify that all components are properly installed. The following items will be observed.
- B. Air Distribution:
  - 1. Mounting and support of equipment.
  - 2. Noise, vibration, air and water leaks.
  - 3. Air filtration, presence of dampers, diffusers, grilles, fire dampers and access doors.
  - 4. Presence of thermostats and other adjustable temperature control devices.
  - 5. Presence of smoke sensors and other safety devices.
  - 6. Instrumentation, gauges, thermometers, flow measuring devices.
  - 7. Hoods and exhaust systems.
- C. Plumbing and Piping Systems:
  - 1. Mounting support of equipment.
  - 2. Noise, vibration and leaks.
  - 3. Strainers, valves fixtures and instrumentation and flow measuring or control.
- D. Heating and Cooling Equipment:
  - 1. General installation and service access.
  - 2. Proper cycling.
  - 3. Excessive noise, vibration or leads.
  - 4. Fuel storage, distribution instrumentation and filtration.
  - 5. Presence of safety devices and controls.
- E. Refrigeration Systems:
  - 1. Compressor operation and lubrication.
  - 2. Unit cooler operation.
  - 3. Cooling fluid flow and control.
  - 4. Temperature maintenance and instrumentation.
  - 5. Vibration, excessive noise and leaks.
- F. Fire Protection System:
  - 1. General installation and compliance with approved shop drawings and design drawings.
  - 2. Head locations.
  - 3. Proper functioning of alarms.
  - 4. NFPA certification - Chapter 13.
  - 5. Locate spare heads, wrench and NFPA 13A manual.

- G. Any discrepancies or deficiencies are to be noted for further investigation during the detailed evaluation.
- H. Verify that all cleaning has been completed.
- I. Verify that all touch-up painting has been completed.

### 3.03 DETAILED EVALUATION

- A. Air distribution systems:
  - 1. Spot checks of approximately 10% of air outlets will be made. Engineer will select outlets and air balancer will demonstrate a reading of that outlet. Where appropriate, the thermostat will be adjusted to simulate full cooling, full heating, hood operation, etc.
  - 2. Air balancer will demonstrate total air flow at each air handler at simulated full cooling and/or maximum fresh air.
  - 3. Air balancer will demonstrate proper air flow at each fume hood, based on previously marked sash positions.
  - 4. Air balancer will demonstrate proper air flow at each process hood.
  - 5. Demonstrate proper room static pressure with respect to adjacent space(s).
  - 6. Motor HP draw will be demonstrated at selected fan motors.
  - 7. Discrepancies between balancing report and spot check results will be dealt with to correct any deficiencies. In the event that significant deficiencies are detected, the entire balancing procedures may be required to be repeated.
  - 8. Any noted drafts or noisy air distribution devices will be evaluated and corrective action taken.
  - 9. Any balancing related problems identified during the Preliminary Walk Through will be addressed and corrected.
- B. Heat Transfer and Hydronic Systems:
  - 1. Contractor will demonstrate that strainers have been cleaned by team observation of approximately 5 strainers selected by the Engineer. If significant debris is found in selected strainers, all strainers will be cleaned.
  - 2. Balancer will demonstrate fluid flows at approximately 10% of flow control devices.
  - 3. Selected pumps will have amp draws demonstrated.
  - 4. Fluid temperatures and pressures will be observed at each system, and compared with design values.
  - 5. Glycol concentration will be measured for compliance with design specifications.
  - 6. Any noted deficiencies between the sample evaluations and the balancing report will be dealt with to correct any deficiencies. In the event that significant deficiencies are detected, the entire balancing procedures may be required to be repeated.
  - 7. Any balancing related problems identified during the Preliminary Walk Through will be addressed and corrected.
- C. HVAC Control Systems:
  - 1. The Control Contractor will demonstrate the proper function of each control system, and instruct Owner's operating personnel in the proper operation of the systems. The balancing contractor will be present to correct flows and assist in fine tuning system.
  - 2. Control Contractor will demonstrate the proper functioning of the following devices:
    - a. Each thermostat to adequately control heating and cooling.
    - b. Each automatic damper and valve.
    - c. Fresh air and return air dampers.
    - d. Economizer operation.

- e. Boiler, chiller and pump starting and stopping from program control.
  - f. Exhaust fan and air handler start and stop.
  - g. Variable air volume control of VAV air handlers, and tracking of associated return fan.
  - h. Variable air volume control of VAV exhaust fans
  - i. Freeze prevention control.
3. Control Contractor will point out proper labeling of each control device.
  4. Control Contractor and Balancing Contractor will coordinate efforts as required until all functions of air distribution and hydronic systems have been fully demonstrated and have been accepted by the District and the Engineer.
- D. Sheet Metal Contractor will demonstrate the following:
1. Proper voltage, overload heater size and rotation of each motor driven fan or air handling device.
  2. Proper belt tension and drive alignment.
  3. Proper clearance and deflection of spring isolation of fans and drives.
  4. Proper installation of flexible connections.
  5. Sealing of all ductwork per specification.
  6. Complete insulation of ductwork and plenums and sound attenuation where required.
  7. Completion of any deficiencies pointed out during balancing and control system commissioning.
  8. Marking and labeling of each air handling device.
  9. Proper shutdown of air handling systems in the event of presence of smoke or products of combustion.
  10. Monitor bearings for heat buildup or noise.
  11. Demonstrate that heating and cooling coil fins are straight.
  12. Demonstrate operation and maintenance of humidification equipment.
  13. Sheet Metal Contractor will correct any deficiencies noted during Preliminary Walk Through and Detailed Evaluation.
  14. Correct any deficiencies discovered during Preliminary Walk Through and Detailed Investigation.
- E. Each Contractor will explain any special features or intricacies of system operation to the building operating personnel. Items covered should include safety features, hazards to be aware of, precautions to be observed to avoid damage to equipment and any necessary seasonal adjustments which are required. Generally discuss service frequency of devices such as bearings, belt drives, filters, strainers, etc. Show maintenance and operating personnel where additional information can be found in the Operating and Maintenance Manuals.
- F. Plumbing and Piping Contractor will demonstrate and explain the following:
1. The cleaning, degreasing and flushing of piping systems.
  2. The proper filling of hydronic and chilled water systems.
  3. Proper glycol concentration and Ph of hydronic and chilled water systems.
  4. Piping and valve marking.
  5. Equipment labeling.
  6. Demonstrate proper operation of fuel supply system.
  7. Demonstrate proper operation of sewage lift pump.
  8. Demonstrate proper operation of sump pumps.
  9. Tour facility and demonstrate proper installation and operation of plumbing fixtures and piping systems.
  10. Demonstrate and explain chemical feed equipment.
  11. Demonstrate operation of air compressor, deionized water equipment and other process equipment.

12. Correct any deficiencies discovered during Preliminary Walk through and Detailed Investigation.
- G. Refrigeration Contractor will instruct equipment operators and demonstrate and explain the following:
1. Proper charging and lubrication of each refrigeration system.
  2. Vibration isolation of equipment.
  3. Proper piping insulation.
  4. Adequate air flow at cold diffusers.
  5. Proper connection of piping.
  6. Proper coolant flow and temperature.
  7. Defrost of cold diffusers.
  8. Maintenance of required temperature in cold boxes.
  9. Proper maintenance and cleaning.
  10. Labeling of equipment and control devices.
  11. Verify proper voltage, rotation and overload heater sizing.
  12. Correct any deficiencies noted during Preliminary Walk Through and Detailed Investigation.

#### 3.04 CERTIFICATION

- A. The following certificate will be signed by each trade listed, indicating that all commissioning work has been completed and that all systems are installed according to the contract documents and manufacturer's installation instructions. The Contractors further certify that all adjustment, lubrication, alignment and startup procedures have been carried out.
- B. Individual Contractor Certifications: (see next page)

CERTIFICATE OF COMPLETION

(Building) \_\_\_\_\_

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

- 1. Mechanical Contractor \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 2. Sheet Metal \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 3. Plumbing \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 4. Fitting \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 5. Balancing \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 6. Controls \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 7. Refrigeration \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 8. Insulation \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 9. Fire Protection \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)

- 10. Refrigeration \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 11. Refrigeration \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)
- 12. Refrigeration \_\_\_\_\_  
(firm)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)

The engineer of record has observed the commissioning process and acknowledges that it was carried out according to the contract documents.

\_\_\_\_\_  
(firm) \_\_\_\_\_ (date)  
\_\_\_\_\_  
(signature)

The District has observed the commissioning and acknowledges that it was carried out to his satisfaction. The District acknowledges receipt of the following documents and services:

- 1. Operating and Maintenance Manuals
- 2. As-built Drawings
- 3. All Certificates
- 4. Operator Instruction

\_\_\_\_\_  
(organization) \_\_\_\_\_ (date)  
\_\_\_\_\_  
(signature) \_\_\_\_\_ (title) \_\_\_\_\_ (date)

## 3.05 SYSTEM WARRANTY

- A. The one-year warranty period which begins with beneficial use of the systems is the responsibility of the Contractor. It is the Contractor's responsibility to repair, adjust or replace any defective material and equipment during the warranty period. It is the Owner's responsibility to notify the Contractor of any deficiencies immediately.
- B. During the warranty period, the Owner and building operators should not make any system adjustments, alterations or repairs without first contacting the Contractor. Adjustment of room thermostats may be made at building occupant's discretion without first contacting the Contractor. The Contractor should be contacted as soon as possible so that a permanent repair can be carried out. The MAINTENANCE/ REPAIR REQUEST FORM (see example at the end of this section) should be used to report and document system malfunctions. Requests must be signed by building superintendent.
- C. Emergency repairs and adjustments may be made to prevent system or building components without first contacting the Contractor. Emergency procedures would include items such as repairing leaks, adjusting controls to prevent building freeze-up or other similar adjustments to prevent the building from becoming uninhabitable or unsafe.
- D. Maintenance procedures which are the responsibility of the building Owner during the warranty period include:
  - 1. Replacement of air filters.
  - 2. Replacement of repair of any items which are broken or damaged by building users.
  - 3. Replacement of water softener salt.
  - 4. Replacement (if required) acid neutralization marble.
  - 5. Cleaning of oil separators or grease traps.
- E. Maintenance / Repair Request:
  - 1. The form on the next page is to be used by the Owner and building occupants to document and report any malfunctions in mechanical systems.

MAINTENANCE / REPAIR REQUEST

Reported by \_\_\_\_\_ Phone (\_\_\_\_\_) \_\_\_\_\_ Date \_\_\_\_\_

Building Superintendent Signature \_\_\_\_\_

Describe Malfunction \_\_\_\_\_

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

Location (i.e. room number/above ceiling/etc.) \_\_\_\_\_

Describe any Temporary Adjustments or Repairs \_\_\_\_\_

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

What is the Urgency of Repair \_\_\_\_\_

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

Has this Been Reported by Telephone \_\_\_\_\_ to Whom \_\_\_\_\_

Name \_\_\_\_\_ Firm \_\_\_\_\_ Phone (\_\_\_\_) \_\_\_\_\_

Date \_\_\_\_\_ Time \_\_\_\_\_ Action Promised \_\_\_\_\_

Repairs Made \_\_\_\_\_

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

by \_\_\_\_\_ Firm \_\_\_\_\_ Date \_\_\_\_\_

Contractor's Comments \_\_\_\_\_

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

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

Certification that repairs have been satisfactorily completed

(Building Superintendent) \_\_\_\_\_ Date \_\_\_\_\_ Time \_\_\_\_\_

Send one copy of this form to Contractor. Place one copy of this form in the Building Operating and Maintenance Manual under the appropriate tab.

END OF SECTION

PROJECT CLOSEOUT

PART 1 - GENERAL

1.01 GENERAL CONDITIONS

- A. Definitions: Closeout is hereby defined to include general requirements near the end of contract time, in preparation for final acceptance, final payment, normal termination of contract, occupancy by Owner and similar actions evidencing completion of the work. Specific requirements for individual units of work are specified in sections of Division 2 through 16. Time of Close-out is directly related to "Substantial Completion".

1.02 RELATED REQUIREMENTS SPECIFIED ELSEWHERE

- A. General and Supplementary General Conditions
- B. Section 01750: Warranty of Work after Final Payment
- C. Section 01750: Certificate of Compliance

1.03 SUBSTANTIAL COMPLETION

- A. When Contractor considers work substantially complete as defined in contract conditions, he shall submit to the Project Manager:
  - 1. Written notice that work, or designated portion thereof, is substantially complete.
  - 2. List of items to be completed or corrected.
  - 3. Conditional Certificate of Occupancy from governing authorities.
  - 4. Project Records and Contract Record Drawings.
- B. Project Manager will at the mutually agreed time, make inspection to determine completion status.
  - 1. Should Project Manager determine that work is not substantially complete:
    - a. Project Manager will promptly notify Contractor, in writing, giving reasons therefore.
    - b. Contractor will remedy work deficiencies, and send second notice of substantial completion to Project Manager.
    - c. Project Manager will re-inspect work, with his cost and/or expense for such to be the Contractor's responsibility.
  - 2. When Project Manager concurs that work is substantially complete, the Architect will:
    - a. Prepare Certificate of Substantial Completion accompanied with Contractor's list of items to be completed or corrected, as verified and amended by the Project Manager and Architect.
    - b. Submit certificate to Owner and Contractor for their written acceptance of the responsibilities assigned to them in the certificate.

1.04 FINAL INSPECTION

- A. When Contractor considers work complete, he shall submit written certification that:
  - 1. Contract documents have been reviewed.
  - 2. Contractor has inspected work for compliance with contract documents.
  - 3. Work has been completed in accordance with contract documents.

4. Equipment and systems have been tested and operated in presence of Owner's representative and are operational.
  5. Copy of substantial completion punch lists stating that each item has been completed or otherwise resolved for acceptance.
- B. Project Manager will, at the mutually agreed time, inspect the work to verify completion status.
1. Should the Project Manager consider work incomplete or defective:
    - a. Project Manager will promptly notify Contractor in writing of any incomplete or defective work.
    - b. Contractor shall immediately remedy deficiencies, and send written certification to Project Manager that work is complete.
    - c. Project Manager will re-inspect work.
  2. When Project Manager finds the work acceptable under contract documents, he will request Contractor to make closeout submittals.

#### 1.05 RE-INSPECTION FEES

- A. Should Project Manager and or Engineer be required to make more than one substantial and/or final inspection due to Contractor's failure to correct specified deficiencies, the Contractor shall bear all costs made necessary by such additional inspections.

#### 1.06 SUBMITTALS

- A. Record Drawings
1. Prior to Final Completion of the Project, the Contractor and/or Subcontractors under his direction, shall submit records of changes on prints to Project Manager.
  2. Accompany submittal with transmittal letter, to Project Manager, containing:
    - a. Date
    - b. Project title and number
    - c. Contractor's name and address
    - d. Title and number of each record document
    - e. Certification that each document as submitted is complete and accurate.
    - f. Signature of Contractor, or his authorized representative.
  3. Provide drawings and special system drawings on CD in AutoCad format.
- B. Project Record Documents
- C. Operating and Maintenance Data
- D. Building Official's Certificate of Occupancy (MUST BE RECEIVED IN TIME TO ALLOW OCCUPANCY ON DATE REQUIRED IN CONTRACT DOCUMENTS).
- E. Warranty of Work after Final Payment Section 01750
- F. Certificate of Compliance Section 01750
- G. AHERA Exclusion document Section 01750
- H. Department of Revenue Tax Clearance Section 01750

- I. Department of Labor Tax Clearance Section 01750
- J. Department of Labor Notice of Completion of Public Works Section 01750
- K. Certificate of Domestic water disinfection.
- L. Evidence of Payments and Release of Liens
  - 1. Contractor's Affidavit of Payment of Debt and Claims.
  - 2. Contractor's Affidavit of Release of Liens including the following:
    - a. Consent of Contractor's Surety to Final Payment.
    - b. Contractor's Release of Waiver of Liens.
    - c. Separate releases of Waivers of Lien for each subcontractor, supplier, and others with lien rights against Owner's property.
- M. Storm Water Pollution Prevention Plan (SWPPP) and associated documents.
  - 1. A copy of the Notice of Intent (NOI) and the plan review location notice shall be posted in the project office on site.
  - 2. A copy of the SWPPP shall be retained in the project office during construction.
  - 3. All records relating to the SWPPP, as well as the Plan, the NOI, and NOT shall be retained by the Contractor and the Municipality of Anchorage for three years after the NOT is issued.
  - 4. Copies of all SWPPP documents are to be delivered to the Municipality of Anchorage and the Anchorage School District upon completion of the project and before final closeout.
- N. Closeout Checklist Section 01750
  - 1. A closeout checklist is provided for convenience in tracking the necessary documentation and deliverables for project closure. This checklist should be updated and submitted with each closeout deliverable.

#### 1.07 FINAL APPLICATION FOR PAYMENT

- A. Follow procedures specified in General and Special Conditions, and also note miscellaneous prerequisites for final payment noted in this section.

#### PART 2. PRODUCTS (NOT USED)

#### PART 3. EXECUTION (NOT USED)

END OF SECTION



CLEANING

PART 1. - GENERAL

1.01 DESCRIPTION

- A. Execute cleaning, during progress of the work, and at completion of the work.

1.02 DISPOSAL REQUIREMENTS

- A. Conduct cleaning and disposal operations to comply with codes, ordinances, regulations, and anti-pollution laws.

PART 2. - PRODUCTS

2.01 MATERIALS

- A. Use only those cleaning materials which will not create hazards to health or property and which will not damage surfaces.

PART 3. - EXECUTION

3.01 DURING CONSTRUCTION

- A. Execute periodic cleaning to keep the work, the site, and adjacent areas free from accumulations of waste materials, rubbish, and debris, resulting from construction operations.
- B. Provide on-site containers for the collection of waste materials, debris, and rubbish.
- C. Remove waste materials, debris, and rubbish from the site periodically and dispose of.

3.02 DUST CONTROL

- A. Clean interior spaces prior to the start of finishing painting and continue cleaning on an as-needed basis until painting is finished.
- B. Schedule operations so that dust and other contaminants resulting from cleaning process will not fall on wet or newly coated surfaces.

3.03 FINAL CLEANING

- A. Employ skilled workmen for final cleaning.
- B. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from sight-exposed interior and exterior surfaces.
- C. Prior to final completion, or Owner occupancy, the Contractor shall conduct an inspection of sight-exposed interior surfaces and all work areas to verify that the entire work is clean.

END OF SECTION



## PROJECT RECORD DOCUMENTS

## PART 1. - GENERAL

## 1.01 REQUIREMENTS INCLUDED

- A. Maintenance of record documents and samples.
- B. Submittal of record documents and samples.

## 1.02 RELATED REQUIREMENTS

- A. Document 00700 - General Conditions.
- B. Section 01300 - Submittals.
- C. Section 01340 - Shop drawings, Product data and Samples.
- D. Section 01700 - Project closeout.
- E. Individual Specifications Sections: Manufacturer's Certificates and Certificates of Inspection.

## 1.03 MAINTENANCE OF DOCUMENTS AND SAMPLES

- A. In addition to requirements in General Conditions, maintain at the job site for Owner's use one record copy of:
  - 1. Contract Drawings.
  - 2. Specifications.
  - 3. Addenda.
  - 4. Change orders and other modifications to the Contract.
  - 5. Reviewed shop drawings, product data and samples.
  - 6. Field test records.
  - 7. Inspection certificates.
  - 8. Manufacturer's certificates.
  - 9. Request for Information (RFI)
  - 10. Request for Proposal (RFP)
  - 11. Current Construction Network.
- B. Store record documents and samples in the field office apart from the documents used for construction.
- C. Label and file record documents and samples in accordance with Section number listings in Table of Contents of this Project Manual. Label each document "PROJECT RECORD" in neat, large, printed letters.
- D. Maintain record documents in a clean, dry and legible condition. Do not use record documents for construction purposes.

Keep record documents and samples available for inspection by the Project Manager.

## 1.04 RECORDING

- A. From the copies of Contract Documents to be furnished by Project Manager, the Contractor and/or Subcontractors shall record on a set of clean, new prints each and every change that is made, at time it is made, in red. This includes any changes that are made in partitions, doors, or otherwise in arrangement of construction of buildings as well as a complete record of exact manner in which electrical and mechanical work, piping, etc., are installed. All Change Orders, RFI's, and Information Bulletins shall be incorporated. Dimensions shall be included where necessary to accurately locate piping and other items that will be concealed underground or in finished building that may later be necessary to service.
- B. Contract Drawings: Legibly mark to record actual construction.
1. Horizontal and vertical location of underground utilities and appurtenances referenced to permanent surface improvements.
  2. Field changes of dimensions and detail.
  3. Changes made by Change Order and other modifications.
  4. Details not on original contract drawings.
  5. References to related shop drawings and modifications.
- C. Shop Drawings: Maintain as record documents, legibly annotate appropriate drawings to record changes made after review.
- D. Specifications and Addenda: Legibly mark up each section to record:
1. Changes made by Change Order.
  2. Manufacturer, trade name and catalog number of each product actually installed, particularly optional items and substitute items.
  3. Changes made by addenda and modifications.
  4. Other matters not originally specified.
- E. Label each document "PROJECT RECORD" in printed letters.
- F. Keep record documents current. No progress payments will be made until record documents are verified by the Project Manager as being current.
- G. Do not permanently conceal any work until required information has been recorded.
- H. Methodology:
1. Changes to Work are described by source documents, including, but not limited to, Field Directives (FD), Information Bulletins (IB), Requests for Information (RFI), and Requests for Proposals (RFP), and their attachments. (Reference Section 00700, Article 12.)
  2. Project Record drawings are to completely and clearly reflect all Changes to Work by graphically showing actual changes to dimensions, locations, materials, assemblies, and other conditions; by graphically deleting conditions replaced by such changes; and by indicating applicable source document's reference number. Such reference number shall not be the sole representation of Changes to Work shown on Project Record drawings.
  3. Where A/E furnishes supplemental drawings, Project Record drawings are to show both the A/E's supplemental drawing reference number and the source document's reference number at the affected location.

1.05 SUBMITTAL

- A. Prior to Final Completion of the Project, the Contractor and/or Subcontractors under his direction, shall submit records of changes on prints to Project Manager.
- B. Accompany submittal with transmittal letter, to Project Manager, containing:
  - 1. Date
  - 2. Project title and number
  - 3. Contractor's name and address
  - 4. Title and number of each record document
  - 5. Certification that each document as submitted is complete and accurate.
  - 6. Signature of Contractor, or his authorized representative.

PART 2. - PRODUCTS (NOT USED)

PART 3. - EXECUTION (NOT USED)

END OF SECTION



## OPERATION AND MAINTENANCE DATA

## PART 1. GENERAL

## 1.01 SECTION INCLUDES

- A. Format and content of manuals.
- B. Instruction of Owner's personnel.
- C. Schedule of submittals.

## 1.02 RELATED SECTIONS

- A. Section 01300 - Submittals
- B. Section 01400 - Quality Control
- C. Section 01420 - Special Inspections
- D. Section 01410 - Testing Laboratory Services
- E. Section 01600 - Material and Equipment
- F. Section 01700 - Contract Closeout
- G. Section 01750 - Closeout Forms
- H. Individual Specifications Sections: Specific requirements for operation and maintenance data.

## 1.03 QUALITY ASSURANCE

- A. Prepare instructions and data by personnel experienced in maintenance and operation of described products.

## 1.04 FORMAT

- A. Prepare data in the form of an instructional manual.
- B. Electronic: Optical Character Recognition (OCR) formatted pdf document.
- C. Cover: Identify each pdf with a title "OPERATION AND MAINTENANCE INSTRUCTIONS"; identify title of Project; identify subject matter of contents.
- D. Provide bookmarked pdf for each separate product and system, with typed description of product and major component parts of equipment.
- E. Text: Manufacturer's printed or typewritten data.
- F. Drawings: Provide with O&M documents.
- G. Contents: Prepare a Table of Contents for each volume, with each Product or System description identified, in three parts as follows:

1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect/Engineer, Contractor, Subcontractors, and major equipment suppliers.
2. Part 2: Operation and maintenance instructions arranged by and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
  - a. Significant design criteria.
  - b. List of equipment.
  - c. Parts list for each component.
  - d. Operating instructions.
  - e. Maintenance instructions for equipment and systems.
  - f. Maintenance instructions for finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
3. Part 3: Project documents and certificates, including the following:
  - a. Shop drawings and product data.
  - b. Air and water balance reports.
  - c. Certificates.
  - d. Photocopies of warranties and bonds.

#### 1.05 CONTENTS, EACH VOLUME

- A. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of Architect/Engineer, Subconsultants, and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.
- B. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- C. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- D. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- E. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions specified in Section 01400.
- F. Warranties and Bonds: Bind in copy of each.

#### 1.06 MANUAL FOR MATERIALS AND FINISHES

- A. Building Products, Applied Materials, and Finishes: Include product data, with catalog number, size, composition, and color and texture designations. (Provide information for re-ordering custom manufactured Products.)
- B. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.

- C. Moisture Protection and Weather Exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional Requirements: As specified in individual Product specification sections.
- E. Provide a listing in Table of Contents for design data.

#### 1.07 MANUAL FOR EQUIPMENT AND SYSTEMS

- A. Each Item of Equipment and Each System: Include description of unit or system, and component parts. Identify function, normal operating characteristics, and limiting conditions. Include performance curves, with engineering data and tests, and complete nomenclature and model number of replaceable parts.
- B. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- C. Include color coded wiring diagrams as installed.
- D. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shutdown, and emergency instructions. Include summer, winter, and any special operating instructions.
- E. Maintenance Requirements: Include routine procedures and guide for troubleshooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Provide servicing and lubrication schedule, and list of lubricants required.
- G. Include manufacturer's printed operation and maintenance instructions.
- H. Include sequence of operation by controls manufacturer.
- I. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- J. Provide control diagrams by controls manufacturer as installed.
- K. Provide Contractor's coordination drawings, with color-coded piping diagrams as installed.
- L. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- M. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- N. Include test and balancing reports as specified.
- O. Additional Requirements: As specified in individual Product specification sections.
- P. Provide a listing in Table of Contents for design data, with tabbed (fly sheet indexed) and space for insertion of data.

## 1.08 MANUALS

- A. Operating and Maintenance Manuals: Submit electronic manual for each identified category.
1. Air Balance Report
  2. Building Commissioning Reports
  3. Materials and Finishes Manual
  4. Equipment and Systems Manual
  5. Digital and Pneumatic Controls Manual
  6. Fire Systems Manual
- B. Warranty and Special Warranty Manual: Submit electronic manuals.

## 1.09 INSTRUCTION OF OWNER PERSONNEL

- A. Before final inspection, instruct Owner's designated personnel in operation, adjustment, and maintenance of products, equipment, and systems, at agreed upon times.
- B. For equipment requiring seasonal operation, provide instructions for all seasons
- C. Use operation and maintenance manuals as basis for instruction. Review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- D. Prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.

## 1.10 SUBMITTALS

- A. Submit copies of preliminary draft or proposed formats and outlines of contents before start of Work. Project Manager will review draft and return copy with comments.
- B. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit advance copy of documents within ten days after acceptance. Include same information within final Operations and Maintenance documents.
- C. Submit draft copy of completed volumes 60 days following acceptance of Project Submittals. Allow 20 days for Architect review and return to Contractor. Provide Contractor resubmittal within 14 days. Allow 14 days for Architect review of resubmittal. Revise content of all document sets as required prior to final submission.
- D. Submit fully approved volumes within 115 days after acceptance of Submittals or 10 days prior to Substantial Completion, whichever occurs first.

PART 2. PRODUCTS (NOT USED)

PART 3. EXECUTION (NOT USED)

END OF SECTION

CLOSEOUT FORMS

PART 1. - GENERAL

- 1.01 The following forms are to be submitted by the Contractor prior to final project closeout.
- 1.02 CERTIFICATION OF SUBSTANTIAL COMPLETION
- A. Use Anchorage School District Form 101 attached herein.
- 1.03 CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS
- A. Use Anchorage School District Form 102 attached herein.
- 1.04 RELEASE ON CONTRACTS
- A. Use Anchorage School District Form 103 attached herein.
- 1.05 CONSENT OF SURETY COMPANY TO FINAL PAYMENT
- A. Use Anchorage School District Form 104 attached herein.
- 1.06 CONSENT OF SURETY TO REDUCTION IN OR PARTIAL RELEASE OF RETAINAGE
- A. Use Anchorage School District Form 105 attached herein.
- 1.07 CERTIFICATE OF COMPLIANCE
- A. The Contractor shall submit a notarized Certificate of Compliance, contained in this section, with his application for Final Payment.
- 1.08 WARRANTY OF WORK AFTER FINAL PAYMENT
- A. The Contractor shall furnish to the Owner a notarized Warranty of Work after Final Payment, contained in this section, with his application for Final Payment.
- 1.09 AHERA EXCLUSION DOCUMENT
- A. The Contractor shall furnish to the Owner a signed AHERA Exclusion Document, contained in this section, with his application for Final Payment.
- 1.10 DEPARTMENT OF LABOR NOTICE OF COMPLETION OF PUBLIC WORKS
- A. The Contractor shall furnish to the Owner a Notice of Completion of Public Works form approved by the Department of Labor with his application for Final Payment.
- 1.11 DEPARTMENT OF REVENUE TAX CLEARANCE REQUEST FORM
- A. For projects funded through the Department of Education (debt reimbursement or DEED grants), the Contractor shall furnish to the Owner a Tax Clearance Request Form approved by the Department of Revenue with his application for Final Payment.
- 1.12 DEPARTMENT OF LABOR TAX CLEARANCE REQUEST FORM
- A. For projects funded through the Department of Education (debt reimbursement or DEED

grants), the Contractor shall furnish to the Owner a Tax Clearance Request Form approved by the Department of Labor, with his application for Final Payment.

1.13 CLOSEOUT CHECKLIST

- A. The closeout checklist is designed to assist the contractor and project manager in the process of completing the project.

**CERTIFICATE OF SUBSTANTIAL COMPLETION**

Project: \_\_\_\_\_ Contract Number: \_\_\_\_\_

Contractor: \_\_\_\_\_ Contract Date: \_\_\_\_\_

Architect: \_\_\_\_\_ Date of Issuance: \_\_\_\_\_

Owner: ANCHORAGE SCHOOL DISTRICT  
1301 Labar Street  
Anchorage, Alaska 99515

**Project Description:**

The work performed under this contract has been reviewed and found to be substantially complete. The date of Substantial Completion is hereby established as: \_\_\_\_\_  
\_\_\_\_\_

**Definition of Date of Substantial Completion:**

The date of substantial completion of the project is the date certified by the Owner when the work is substantially complete in accordance with, and defined in the Contract Documents.

A list of items to be completed or corrected, prepared by the Owner and verified and amended by the Architect is appended hereto. The failure to include any items or such list does not alter the responsibility of the Contractor to complete the project in accordance with the Contract Documents.

The Contractor will complete or correct the work on the list of items appended hereto within 30 days from the date of substantial completion.

The responsibilities of the Owner and the Contractor for maintenance, heat, utilities, and insurance shall be as follows: \_\_\_\_\_  
\_\_\_\_\_

In reliance upon the certification of the Contractor and the Architect, the Owner hereby accepts the project as substantially complete. In accordance with the Contract Documents, the Owner hereby elects to assume occupancy of \_\_\_\_\_

\_\_\_\_\_ at \_\_\_\_\_ a.m./p.m. on \_\_\_\_\_.

Owner: **ANCHORAGE SCHOOL DISTRICT**

By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Architect:

By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_

Contractor:

By: \_\_\_\_\_ Title: \_\_\_\_\_ Date: \_\_\_\_\_  
ASD 101 (01/03)

**CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS  
ANCHORAGE SCHOOL DISTRICT**

WHEREAS, by the terms of a contract dated \_\_\_\_\_ entered into by the  
Anchorage School District, and \_\_\_\_\_ for the construction of

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

EXCEPTIONS:

IN WITNESS WHEREOF, the seal of the undersigned Contractor have been hereunto set this  
\_\_\_\_\_ day of

\_\_\_\_\_, at \_\_\_\_\_

By \_\_\_\_\_

\_\_\_\_\_ being first duly sworn, say that I am the agent for and executed  
the foregoing under authority of said company to do so; that I have read the same, know the contents thereof, and the  
matters set forth therein are as I truly believe.

By \_\_\_\_\_

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_

\_\_\_\_\_, at \_\_\_\_\_

Notary Public in and for \_\_\_\_\_

My Commission Expires \_\_\_\_\_

**RELEASE ON CONTRACT  
ANCHORAGE SCHOOL DISTRICT**

WHEREAS, by the terms of a contract dated \_\_\_\_\_ entered into by the Anchorage School District,

and \_\_\_\_\_ for the construction of \_\_\_\_\_

\_\_\_\_\_, it is provided that:  
*"Neither the final payment nor the remaining retained percentage shall become due until the Contractor shall provide the Owner (1) with a waiver and release of liens, on the forms provided by the Owner, executed by the Contractor..."*

NOW THEREFORE, in consideration of the premises and the payment by the Anchorage School District to the undersigned Contractor of the amounts due under the contract and any changes or modifications thereto, to wit, the sum

of \$ \_\_\_\_\_ Dollars,

(Numbers)  
(In Words)

the undersigned Contractor hereby releases and forever discharges the Anchorage School District including its property, particularly that real property known as:

\_\_\_\_\_ of the Anchorage School District, of and from all manner of debts, dues and sum or sums of money, accounts, claims, and demands whatsoever, in Law and in equity, under or by virtue of said contract, and warrants good title to all material, supplies and equipment installed or incorporated in the project and all work delivered to the premises, together with all improvements and appurtenances constructed thereon by:

\_\_\_\_\_ to the Anchorage School District free of any claims, liens or encumbrances. Neither the undersigned nor any person, firm or corporation furnishing material or labor for any work covered by this Contract has any right to a lien upon the premises nor improvement thereon, except:

\_\_\_\_\_.

**IN WITNESS WHEREOF**, the signature of the undersigned Contractor has been hereunto set this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, at \_\_\_\_\_, Alaska.

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

Printed Name: \_\_\_\_\_

I, \_\_\_\_\_, being first duly sworn, say that I am the agent for and executed the foregoing under authority of said company to do so; that I have read the same, know the contents thereof, and the matters set forth therein are as I truly believe.

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

Subscribed and sworn to before me this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_, at \_\_\_\_\_, Alaska.

Notary Public in and for \_\_\_\_\_

My Commission Expires: \_\_\_\_\_.

ASD Form 103

**CONSENT OF SURETY COMPANY  
TO FINAL PAYMENT**

**PROJECT:** \_\_\_\_\_ **PROJECT NUMBER:** \_\_\_\_\_

**TO:** Anchorage School District **CONTRACT DATE:** \_\_\_\_\_

**CONTRACTOR:** \_\_\_\_\_

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above:

\_\_\_\_\_  
(Surety Company)

on bond of

\_\_\_\_\_  
(Contractor)

**hereby approves of the final payment** to the Contractor, and agrees that final payment to the Contractor shall not relieve the Surety Company of any of its obligations to **Anchorage School District, Owner** as set forth in said Surety Company's bond. Surety expressly agrees that any and all valid claims of sub-Contractors and all persons supplying labor or materials to the project will be satisfied by Contractor or Surety in a timely manner

**IN WITNESS WHEREOF**, the Surety Company has hereunto set its hand this

day of \_\_\_\_\_, 20\_.

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

Attest

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

\_\_\_\_\_  
Title

ASD 104

**CONSENT OF SURETY TO REDUCTION IN OR PARTIAL RELEASE OF RETAINAGE  
ANCHORAGE SCHOOL DISTRICT**

**PROJECT:** \_\_\_\_\_ **PROJECT NUMBER:** \_\_\_\_\_  
**TO: Anchorage School District** **CONTRACT DATE:** \_\_\_\_\_  
**CONTRACTOR:** \_\_\_\_\_

In accordance with the provisions of the Contract between the Owner and the Contractor as indicated above, the:

\_\_\_\_\_ (Surety Company)  
on bond of  
\_\_\_\_\_ (Contractor)

**HEREBY APPROVES OF THE REDUCTION IN OR PARTIAL RELEASE OF RETAINAGE** to the Contractor as follows:

The surety agrees that such reduction in or partial release of retainage to the Contractor shall not relieve the Surety of any of its obligations to **ANCHORAGE SCHOOL DISTRICT, OWNER**

**IN WITNESS WHEREOF**, the Surety Company has hereunto set its hand this  
day of .

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

Attest

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

\_\_\_\_\_  
Title

ASDF Form 105

CERTIFICATE OF COMPLIANCE

No final payment shall be made until the Contractor shall file with the Owner, prior to acceptance of the work, a notarized Certification of Compliance in the following form:

\*\*\*\*\*

The Contractor does hereby certify that all work has been performed and materials supplied in accordance with the Drawings, Specifications and Contract Documents for the above work, and that:

No less than the prevailing rates of wages as ascertained by the governing body of the Contracting Agency has been paid to laborers, workmen and mechanics employed on this work;

There have been no unauthorized substitutions of Subcontractors; nor have any subcontracts been entered into without prior notice having been submitted to the Owner prior to the start of such subcontracted work;

No subcontract was assigned or transferred or performed by any Subcontractor other than the original Subcontractor, without prior notice having been submitted to the Owner together with the names of all Subcontractors;

All claims for material and labor and other paid service performed in connection with these specifications have been paid;

All monies due the State Industrial Accident Fund, the State Unemployment Compensation Trust Fund, the State Tax Commission, Hospital Associations and/or others have been paid.

In WITNESS WHEREOF, the undersigned has signed and sealed this instrument this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

\_\_\_\_\_  
(Firm Name)

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

\_\_\_\_\_  
(Title)

(Attest)

(SEAL IF BIDDER IS A CORPORATION)

As determined necessary, evidence of compliance may be required to be submitted with and made a part of this Certificate of Compliance.

WARRANTY OF WORK

Prior to Final Payment, the Contractor shall furnish to the Owner a Warranty of Work in the following form:

\*\*\*\*\*

The Contractor does hereby warrant all work and materials to be in full and complete accordance with the Contract Documents and Agreement between Owner and Contractor, and requirements appertaining thereto; that all work and materials are free from any and all defects and imperfections, and fully suitable for the use and purposes for which each and every part is intended. The Contractor also agrees that, should any defect develop or appear which the Project Manager or Owner's Representative finds was Not caused by improper use, the Contractor shall promptly, upon demand, fully correct, substitute and make good any such defective material without any cost to the Owner and will save the Owner harmless against any claim, demand, loss or damage by reason of any breach of this warranty.

The period of this warranty shall commence on the date of Substantial Completion.

The warranty shall continue to be in full force and effect for the period of one (1) year, except for those items for which a longer period of warranty is specifically stated in the Warranties for work in Technical Sections of the Specifications.

Warranties for work stated in Technical Section shall continue in full force and effect for the respective periods expressly stated.

In WITNESS WHERE, the undersigned has signed and sealed this instrument this

\_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

(Firm Name) \_\_\_\_\_

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

(Title) \_\_\_\_\_

(Attest) \_\_\_\_\_

(SEAL IF BIDDER IS A CORPORATION)

**AHERA Exclusion Document**

Contractor's Verification of Asbestos-Free Construction

Project: \_\_\_\_\_ Project Number: \_\_\_\_\_

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

To: Anchorage School District  
Facilities Coordinator,  
AHERA LEA Designated Person

To the best of our knowledge, no asbestos-containing building materials were installed in this project.

Attest: \_\_\_\_\_  
Signature of Authorized Representative

\_\_\_\_\_  
Title

Department of Labor and Workforce Development  
 Labor Standards and Safety Division  
 Wage and Hour Administration  
 www.labor.state.ak.us/lss/lss.htm



## NOTICE OF COMPLETION OF PUBLIC WORKS

### Additional Filing Fee May Be Required

- This form must be typed or printed in ink.
- Fill in all blanks or form will be returned for correction (see back).
- Please allow a minimum of 30 working days for processing.

ENTER YOUR FAX # \_\_\_\_\_  
 AND LIST YOUR MAILING ADDRESS BELOW

Contractor, company or agency name, address, city, state & ZIP + 4

Project Name	Contract #	
Contract awarding agency		
Address		
City	State	ZIP + 4
Contract awarding agency contact person		Phone #
Location and city where work was performed		
DOLWD Project #		
Project Completion Date / /		

Primary contractor (has contract with the public agency)

**IF YOU HAVE ALREADY PAID \$5,000 IN FEES FOR THIS PROJECT, OR IF YOU PREVIOUSLY PAID ALL FEES DUE AND DID NOT HAVE ANY INCREASES IN CONTRACT AMOUNTS ENTER "NONE" AND, SKIP TO CERTIFICATION. OTHERWISE, DESCRIBE ADDITIONAL WORK.**

Description of additional contract/subcontract work performed	Name of contractor who performed this work	Amount of subcontract
<b>CERTIFICATION:</b> I hereby certify that the above information is correct. Enclosed is the additional filing fee computed at 1% of the total amount of all new contracts on this project, including the contract price of new work performed by the primary contractor not previously reported on the Notice of Work, up to a maximum of \$5,000. I also certify that all contractors who worked on this project complied with prevailing wage requirements as described in AS 36.05.010-.110 and AS 36.10.007-.990.	Total value of additional subcontracts	\$
	Additional value of work performed by primary contractor +	\$
	Amount subject to fee	\$
	<b>Multiply by .01</b>	
	<b>Supplemental fee enclosed = ROUND FEES TO NEAREST DOLLAR</b>	\$
For Dept. Use Only		
Amount: _____ Check Number: _____ Cash _____ Received By: _____ Date: _____ Credit Card Confirmation _____ Visa ___ MC _____ Project Name _____ DOLWD Project # _____		
Wage & Hour date-stamped copy of this form will serve as temporary receipt.		
Signature _____ Date _____		
Title _____		
Fax # _____ Phone # _____		
For Dept. Use Only		
T-36 Clearance Approved By _____ Department of Labor and Workforce Development		

## How to expedite the processing of your form:

### ERRORS THAT CAUSE REJECTION

No fee included or incorrect amount. If total contract amount is less than \$25,000 no filing fee is required. Contract amounts paid to owner/operators with no employees are exempt from the fee. **The maximum total filing fee for any one project is \$5,000.00.**

Missing - Value of work performed by primary contractor.

Missing – The name of each **NEW** subcontractor and the amount of the contract OR the name of existing subcontractors and the amount of any **NEW** work not previously reported on the Notice of Work.

Missing – Notice of Completion of Public Works must be signed by an authorized representative.

### FILING INSTRUCTIONS

Additional fees are required for any increase in contract value, unless the maximum fee (\$5,000) has been paid.

If there is not enough space to list all required information on one form, use additional sheets. Please indicate at the top of each sheet “Page 1 of 2”, “Page 2 of 2”, etc. No other attachments will be accepted.

A Wage and Hour Administration (WH) date-stamped copy of this form will serve as a temporary receipt, while the acceptance of fees is processed. WH will mail or fax the approved copy of this form to the organization provided on the front of this form. Make a copy for your records. This will serve as your notice that the fees paid have been accepted by WH.

For questions call the nearest WH office:

Juneau: (907) 465-4842      Anchorage: (907) 269-4900      Fairbanks: (907) 451-2886

For more forms, see [www.labor.state.ak.us/lss/lssforms.htm](http://www.labor.state.ak.us/lss/lssforms.htm)

Submit the notice and the appropriate filing fee to:

Alaska Department of Labor and Workforce Development  
Wage and Hour Administration  
3301 Eagle Street, Ste. 301  
Anchorage, AK 99503-4149

If no fee is required, you may fax the notice to (907) 269-4915

**Alaska Department of Revenue  
TAX CLEARANCE REQUEST FORM**

**Applicant's Name:** \_\_\_\_\_

**EIN/SSN:** \_\_\_\_\_

**Mailing Address:** \_\_\_\_\_

**City/State/Zip Code:** \_\_\_\_\_

I hereby authorize the Alaska Department of Revenue to release to

\_\_\_\_\_  
(Name of Department or Agency)

Department's Statute on tax clearance: \_\_\_\_\_

whose facsimile number or email address is \_\_\_\_\_

confirmation that all taxes, penalties and interest due the Department of Revenue have been paid and that there are no outstanding amounts due.

**Signed:** \_\_\_\_\_

**Printed Name:** \_\_\_\_\_

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

\*If tax clearance is being requested on behalf of a corporation/LLC/partnership, must be signed by an officer/member/partner.

**Send completed form by email to the Department of Revenue at [DOR.tax.accounting@alaska.gov](mailto:DOR.tax.accounting@alaska.gov)**

<i>DEPARTMENT USE ONLY</i>	
<input type="checkbox"/>	<i>The above applicant is current on all taxes, penalties and interest due and is in good standing with the Alaska Department of Revenue.</i>
<input type="checkbox"/>	<i>The above applicant is not current on all taxes, penalties and interest due and is not in good standing with the Alaska Department of Revenue.</i>
_____ <i>Department of Revenue Representative</i>	_____ <i>Date</i>

TaxClearanceRequestForm (Rev 2/21)



THE STATE of ALASKA GOVERNOR MICHAEL J. DUNLEAVY

Department of Labor and Workforce Development

Division of Employment and Training Services Employment Security Tax

P.O. Box 115509 Juneau, AK 99811-5509 Relay Alaska (in state): (800) 770-8973 or 7.1.1 Relay Alaska (out of state): (800) 770-8255 Toll free: (888) 448-2937 Phone: (907) 465-2787 Fax: (907) 465-2374

Tax Clearance Request Form for Contractors

Date of request: \_\_\_\_\_

Business name of the contractor a Tax Clearance is being requested for: \_\_\_\_\_

Business address: \_\_\_\_\_

Business contact phone number: \_\_\_\_\_

Federal Identification Number: \_\_\_\_\_

Alaska Employer Account Number: \_\_\_\_\_

Specific time period a tax clearance is being requested for (i.e. beginning and ending date of a subcontract agreement): \_\_\_\_\_

Subcontract project name: \_\_\_\_\_

Name and address of the person this Tax Clearance is to be returned to: \_\_\_\_\_

Comments or additional information: \_\_\_\_\_

For agency use only:

- Tax Clearance is granted
Tax Clearance is not granted (please have employer contact the department)
No account on file, liability unknown (please have employer contact the department)
Employer has stated no employees, Tax Clearance not required.

Agency representative signature: \_\_\_\_\_ Date: \_\_\_\_\_

Agency representative title: \_\_\_\_\_

We are an equal opportunity employer/program. Auxiliary aids and services are available upon request to individuals with disabilities. labor.alaska.gov/estax

Rev. 8/2018

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

Project Number: \_\_\_\_\_

<b>PROJECT CLOSEOUT CHECKLIST</b>	<b>Number Required</b>	<b>Number &amp; Date Delivered</b>
<b>Inspection Documents</b>		
Substantial Completion Inspection Documents	1	
Substantial Completion Punch List	1	
Final Inspection Documents	1	
Final Inspection Punch List	1	
Certificate of Substantial Completion (ASD Form 101)	1	
<b>Contractor Submittals</b>		
As-built drawings to Engineer of Record (Section 01700)	1	
All project record documents (Section 01720)	1	
Maintenance and Operations Manuals – Electronic version – OCR pdf (Section 01730)	1	
Warranty and Special Warranty Manuals (Section 01730)	4	
Certificate of Domestic Water Disinfection (Section 01700)	2	
Warranty of Work (Section 01750)	1	
Certificate of Compliance (Section 01750)	1	
Building Officials Certificate of Mechanical and Electrical Inspection	3	
Building Official's Certificate of Occupancy	3	
Building Official's Certificate of Completion	3	
AHERA Response Action Report (RAR)	1	
AHERA Exclusion Document (Section 00630)	1	
Return school keys to lock shop	1	
Lock Shop Release Form (signed)	1	

**Project Title:** \_\_\_\_\_

**Project Number:** \_\_\_\_\_

<b>PROJECT CLOSEOUT CHECKLIST</b>	<b>Number Required</b>	<b>Number &amp; Date Delivered</b>
Contractor's Affidavit of Payment of Debts and Claims (ASD Form 102)	1	
Consent of Surety Company to Final Payment (ASD Form 104)	1	
Release on Contract (ASD Form 103)	1	
Consent of Surety to Reduction in/or Partial Release of Retainage (ASD Form 105)	1	
Engineered As-built drawings and special system drawings on reproducible CD's (not zipped)	1	
Engineered As-built drawings and special system drawings on bond/blacklines	2	
Spare Parts deliverables	1	
Copy of Warranty for all items with Extended Warranty	1	
Notice of Completion of Public Works (Section 00630) (Approved DOL Clearance Form)	1	
Dept. of Revenue Tax Clearance Form (Section 00630) (Approved DOR Tax Clearance Form)	1	
Dept. of Labor Tax Clearance Form (Section 00630) (Approved DOL Tax Clearance Form)	1	
Apprenticeship Program - Purchasing release for final payment (projects over \$100,000)		
Final Application and Certificate for Payment (ASD Form 100A-C)	1	
Base Access Pass(s) returned to Visitor Control Center	NA	

\_\_\_\_\_

Project Manager Signature

\_\_\_\_\_

Date

END OF SECTION

## UTILITY LOCATION REQUIREMENTS

## PART 1. - GENERAL

## 1.01 DESCRIPTION

- A. Upon receipt of written notification from any of public agencies or utilities that Contractor has caused damage to any facility, equipment or installation of agency, and Contractor failed to request a utility locate service from said utility at least two (2) normal business days prior to damage, or if locate services was properly requested, that damage was not approximately caused by error in locate service, Owner will withhold from forthcoming or accrued Contract payment, including advances, a sum sufficient to protect agency or utility from loss. Public agencies or utilities that provide notice of facility damage under this paragraph are:

Anchorage Water and Wastewater Utility  
Alaska Communications Systems  
Alaska Fiber Star  
Alaska Native Medical Center  
Alaska Railroad Corporation  
Alyeska Cable / TelAlaska  
Anchorage School District  
Aircraft Service International Group  
AT&T Alascom  
Chugach Electric Association, Inc.  
Department of Transportation Street Lights, State of Alaska  
Enstar Natural Gas Company  
Flint Hills Resources/Williams Alaska Pipeline  
GCI Cable  
Matanuska Electric Association  
Matanuska Telephone Association  
Municipality of Anchorage/Department of Public Works  
Municipal Light & Power Utility  
Tesoro Alaska Inc.

- B. Upon receipt of release of claim by notifying utility or upon judgment of a court having jurisdiction in matter and having established that Contractor is liable for a lesser amount or is not liable for damage, Owner will release excess funds to Contractor. Funds withheld pursuant to this provision shall not bear interest. Upon receipt of satisfactory evidence against Contractor in court of competent jurisdiction within sixty (60) days after discovery of damage, Owner shall release funds withheld pursuant to this provision.

## 1.02 PROTECTION OF UTILITIES

- A. Any pipes or other utilities encountered in excavation shall be shored up and cared for by Contractor as to leave them in a proper working condition until such times as Owner determines what shall be done with them.
- B. Any utilities mislocated or inadequately located by appropriate utility company which are damaged by Contractor shall not constitute reimbursement or time extensions to Contractor from Owner for repair(s) of work that Contractor performs.
- C. Contractor shall coordinate his work to cooperate with original utility service installed.

## PART 2. - PRODUCTS (NOT USED)

## PART 3. - EXECUTION (NOT USED)

END OF SECTION



## EXTERIOR INSULATION AND FINISH SYSTEM (EIFS)

## PART 1. GENERAL

## 1.1 GENERAL

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paints may be present on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the work area. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.

## 1.2 RELATED SECTIONS

- A. Section 01045 – Cutting and Patching
- B. Section 09 91 00 - Painting

## 1.3 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Specification. The publications are referred to in the text by basic designation only. In case of conflict the most stringent shall apply.
1. Underwriters Laboratories Inc (UL) listing and "Building Materials Directory."
  2. ASTM B117 - Practice for Operating Salt Spray (Fog) Apparatus.
  3. ASTM C67 - Test Methods of Sampling and Testing Brick and Structural Clay Tile.
  4. ASTM C177 - Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Guarded Hot Plate Apparatus.
  5. ASTM C297 - Test Method for Tensile Strength of Flat Sandwich Constructions in Flatwise Plane.
  6. ASTM C518 - Test Method for Steady-State Heat Flux Measurements and Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus.
  7. ASTM C578 - Specification for Rigid, Cellular Polystyrene Thermal Insulation.
  8. ASTM C1002 - Specification for Steel Drill Screws for the Application of Gypsum Panel Products or Metal Plaster Bases.
  9. ASTM C1397 - Practice for Application of Class PB Exterior Insulation and Finish Systems.
  10. ASTM D968 - Test Method for Abrasion Resistance of Organic Coatings by Falling Abrasive.
  11. ASTM D1621 - Test Method for Compressive Properties of Rigid Cellular Plastics.
  12. ASTM D2247 - Practice for Testing Water Resistance of Coatings in 100%

Relative Humidity.

13. ASTM D2842 - Test Method for Water Absorption of Rigid Cellular Plastics.
14. ASTM D3273 - Test Method for Resistance to Growth of Mold on the Surface of Interior Coatings in an Environmental Chamber.
15. ASTM E84 - Test Method for Surface Burning Characteristics of Building Materials.
16. ASTM E96 - Test Methods for Water Vapor Transmission of Materials.
17. ASTM E330 - Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
18. ASTM E331 - Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.
19. ASTM G23 - Practice for Operating Light Exposure Apparatus (Carbon-Arc Type) With and Without Water for Exposure of Nonmetallic Materials.
20. ASTM G53 - Practice for Operating Light and Water-Exposure Apparatus (Fluorescent UV-Condensation Type) for Exposure of Nonmetallic Materials.
21. EIMA (Exterior Insulation Manufacturers Association) - Guideline Specification For Exterior Insulation and Finish Systems, Class PB and Class PM.
22. EIMA Test Method and Standard 101.86 - Resistance of Exterior Insulation Finish Systems to the Effects of Rapid Deformation (Impact).
23. National Fire Protection Association (NFPA) 268 – Standard Test Method for Determining Ignitability of Exterior Wall Assemblies Using a Radiant Heat Energy Source.
24. NFPA 285 - Method of Test for the Evaluation of Flammability Characteristics of Exterior (Nonload Bearing Wall) Assemblies Containing Combustible Components Using the Intermediate- Multistory Test Apparatus.
25. UL 723 - Test for Surface Burning Characteristics of Building Materials.
26. AWCI (Association of the Wall and Ceiling Industries - International) - Recommended Practice for the Installation of Exterior Insulation and Finish Systems.

#### 1.4 SYSTEM DESCRIPTION

- A. Exterior Insulation and Finish System (EIFS): Complete EIMA polymer based class (PB) system with all components approved by finish coat manufacturer: air-moisture barrier, board insulation, adhesive and mechanical attachment of insulation to substrate, with trim, flashing, concealed drainage system, base coat, glass fiber reinforcing mesh and finish coat.

#### 1.5 PERFORMANCE REQUIREMENTS

- A. General Physical Properties: The system shall meet or exceed the following:
  1. Recommended in writing by finish coat manufacturer for commercial use.
  2. Accelerated Weathering.
    - a. Test: ASTM G23 or G53:
    - b. Testing period: 2,000 hours.
    - c. Test Specimen: exterior insulation and finish system with 1 inch insulation mounted on gypsum board of ½ inch thickness and cured for a minimum of 28 days. Minimum sample size 12 by 12 inch. Results: no cracking, checking, crazing, erosion, rusting, blistering, delamination, or similar deleterious effects.

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3. Water Penetration.
  - a. Test: ASTM E331.
  - b. Test Specimen: exterior insulation and finish system with 1 inch insulation mounted on gypsum board of ½ inch thickness and cured for a minimum of 28 days. Minimum sample size 24 by 48 inch.
  - c. Results: No water penetration beyond the plane of the base coat - EPS board interface after 15 minutes at 6.24 psi.
  
4. Water Resistance.
  - a. Test: ASTM D2247.
  - b. Test Period: 14 day exposure
  - c. Test Specimen: exterior insulation and finish insulation system with 1 inch insulation mounted on gypsum board of ½ inch thickness and cured for a minimum of 28 days. Minimum sample size 12 by 12 inch.
  - d. Results: No deleterious effects.
  
5. Water Vapor Transmission (Coating only).
  - a. Test: ASTM E96 Water Method, Procedure B.
  - b. Test Specimen: Lamina only, consisting of mesh, base and finish coats, standard thickness.
  - c. Result: Minimum: 10 perms.
  
6. Freeze - Thaw Resistance:
  - a. Test: modified ASTM C67: the specimen subjected to 4 days underwater soak followed by 60 cycles as follows: - 10 degrees C for 2 hours and plus 20 degrees C for 2 hours.
  - b. Test Specimen: 3 samples 4 inch by 8 inch by 1 inch exterior insulation and finish system, coated on all sides with the manufacturer's base coat, reinforcing fabric, and finish coat. The sample shall cure for a minimum of 28 days.
  - c. Results: No cracking, checking, crazing, erosion, rusting, blistering, peeling or delamination.
  
7. Abrasion Resistance.
  - a. Test: ASTM D968.
  - b. Test Specimen: exterior insulation and finish system with one-inch insulation mounted on gypsum board of ½ inch thickness and cured for a minimum of 28 days.
  - c. Results: No cracking, checking, or loss of film integrity after 500 liters of sand.
  
8. Tensile Adhesion.
  - a. Test: ASTM C297 modified.
  - b. Results: no failure under in adhesive, mechanical fasteners, base coats or finish coat.
  
9. Mildew Resistance.
  - a. Test: ASTM D3273.
  - b. Test Specimen: Exterior insulation and finish system with 1 inch insulation.
  - c. Result: No growth during 28-day exposure.

B. Fire Test Performance.

1. Conform to IBC 2603 including: Surface Burning.
  - a. Test: ASTM E84.
  - b. Results: Flame spread index: 25 maximum. Smoke developed index: 450 maximum.
2. Full Scale Multi-Story Fire Test.
  - a. Test: NFPA 285
3. Ignition: Exterior walls shall not exhibit sustained flaming where tested per NFPA 268.

C. Structural Testing.

1. Impact Resistance.
  - a. Test: EIMA Test Methods and Standard 101.86.
  - b. Results: 25 - 49 in pounds standard, 150 inch pounds minimum at double reinforced areas when indicated.
2. Negative Wind Load/Full Scale Testing.
  - a. Test: ASTM E-330 Procedure "B" Positive and Negative Air Pressure.
  - b. Test Specimen: The sample shall be minimum 4 feet by 8 feet and consist of studs, sheathing and 1-inch exterior insulation system.
  - c. Result: Withstand wind loads required by local building codes without deterioration: 90 PSF negative minimum.

1.6 SUBMITTALS

- A. Shop Drawings: Indicate insulation joint patterns, joint, penetration and edge details, flashing, expansion joints and molding profiles.
- B. Product Data: Provide manufacturer's data on system materials, mechanical fasteners, moisture drainage paths, joint sealants, product characteristics, performance criteria, limitations, and fire/smoke resistance indicating compliance with specifications.
- C. Samples: Submit three, 12 by 12 inch size samples illustrating coating color and texture range for selection.
- D. Manufacturer's Installation Instructions: Indicate preparation required, installation techniques, jointing requirements, and cold weather installation requirements.
- E. Manufacturer and applicator qualifications:
  1. Telephone numbers for Owners and Architects.
- F. Certification by manufacturer that system proposed meets specified criteria.

1.7 QUALIFICATIONS

- A. Manufacturer: Company manufacturing EIFS products for minimum 7 years documented experience and at least 3 similar jobs in Alaska.

B. Applicator: Company specializing in performing the work of this section with minimum 5 years similar jobs experience and approved by EIFS manufacturer within the previous calendar year.

1.8 REGULATORY REQUIREMENTS

A. Conform to 2006 International Building Code 2603 Foam Plastic Insulation.

1.9 PREINSTALLATION MEETING

A. Convene a meeting with installer prior to start of EIFS installation when substrate is ready.

B. Verify approved submittals including air-water barrier, insulation attachment, edges, flashing and sealants.

1.10 DELIVERY, STORAGE, AND HANDLING

A. Deliver, store, protect and handle products as recommended by EIFS manufacturer.

B. Protect adhesives and finish materials from freezing by storing in clean dry area at not less than 40 degrees F.

1.11 ENVIRONMENTAL REQUIREMENTS

A. Do not install work during rain or snow on frozen or damp substrate. Maintain materials and substrate dry and above 40 degree F. temperature 24 hours prior, during and 24 hours after installation of finish.

B. Provide supplemental heat and enclosure as necessary.

PART 2. PRODUCTS

2.1 APPROVED EIFS MANUFACTURERS

A. Complete systems subject to compliance with specified criteria:

1. Dryvit Systems: [www.dryvit.com](http://www.dryvit.com)
2. Synergy: [www.basf.com](http://www.basf.com)
3. Sto Corp: [www.stocorp.com](http://www.stocorp.com)
4. Substitutions: Or approved equal.

2.2 MATERIALS

A. Rigid Expanded Polystyrene Board (EPS) Insulation; ASTM C578, and as recommended by approved EIFS manufacturer, requirements as follows:

1. Minimum thermal resistance "R" for one inch: 4.8 at 25 degrees F. per ASTM C177 or ASTM C518.
2. Thickness: Thickness indicated or 1-inch minimum with drain grooves as required by EIFS manufacturer.
3. Board Size: 2 foot by 4 foot maximum.
4. Board Dimensional Tolerance: 1/16 inch from square and dimension.
5. Minimum density: one pound per cubic foot.
6. Minimum compressive resistance: 10 psi per ASTM D1621.
7. Maximum water absorption: In accordance with ASTM D2842 3 percent by

volume.

8. Square edges.
9. Flame/Smoke Properties: 75/450 maximum in accordance with ASTM E84.
10. Each piece of foam plastic shall bear the label of an approved agency, manufacturer and description per IBC 2603.5.6.

B. Air-Moisture Barrier

1. Liquid applied water and air resistant coating to structural sheathing recommended compatible by EIFS manufacturer. Include tape-mesh joint treatment.

C. Primer and Base Coat: PB type recommended by approved EIFS manufacturer.

1. Coating Reinforcement: Glass fiber open weave mesh type, 4.5 ounces per square yard minimum treated for improved bond with coating approved by finish coat manufacturer.
2. Where indicated ground floor applications and facades exposed to deliberate impacts shall have additional heavy mesh to achieve a minimum mechanical stress resistance of 150 in-pounds minimum in accord with EIMA Test Method and Standard 101.86.

D. Insulation/Adhesive

1. Liquid applied recommended by EIFS manufacturer to adhere EPS insulation for substrate conditions of use.

E. Finish Coating: Synthetic acrylic Polymer integral color base, same manufacturer as base coat, air curing, containing integral colors as selected. Color match existing, OWNER'S REPRESENTATIVE to provide mockup.

1. Finish texture: smooth uniform fine sand similar to Dryvit "Sandpebble fine" or Senergy "Sahara."

2.3 ACCESSORIES

A. Mechanical Insulation Attachment:

1. Number 10 minimum self-tapping screws countersunk in 1.5 inch minimum diameter plastic washers recommended by manufacturer for EIFS.
2. Adequate screw penetration, minimum one inch, into substrate to pull screw heads below surface of foam insulation and resist performance requirements.
3. Corrosion resistance: 500 hours of salt spray tests per ASTM B117 with no more than 5% red rust.
4. Tru-fast: [www.trufast.com](http://www.trufast.com),  
Wind-Lock: [www.wind-lock.com](http://www.wind-lock.com),  
Buildex [www.itwbuildex.com](http://www.itwbuildex.com) or substitution in accord with Division 1.

B. Trim and Control Joints: PVC plastic with attachment flanges and weep-drain holes approved by EIFS manufacturer.

C. Special drain-grooved insulation, drainage mesh, vent, weeps, flashing, trim and tracks recommended by EIFS manufacturer.

2.4 SEALANT MATERIALS

A. Single component silicone type with primer recommended compatible by EIFS

manufacturer.

- B. Closed cell polyethylene backer rod 25 percent larger than opening.
- C. Bond-breaker tape: to prevent shallow joint sealant three side adhesion.

### PART 3. EXECUTION

#### 3.1 EXAMINATION

- A. Verify that substrate and adjacent materials are clean, dry and sound.
- B. Verify substrate surface is flat, free of irregularities.
- C. Beginning of work shall mean acceptance of substrate as capable of producing an acceptable job.

#### 3.2 PROTECTION

- A. Mask and protect adjacent surfaces from EIFS stains and spills.

#### 3.3 INSTALLATION – AIR-MOISTURE BARRIER

- A. Coat building sheathing, tape and seal joints, edges, penetrations, and corners in accordance with EIFS manufacturer's instructions.

#### 3.4 INSTALLATION - INSULATION BOARDS

- A. Install insulation board in accordance with EIFS manufacturer's instructions and approved submittals over air-moisture barrier coating, over building sheathing. Align drainage channels.
- B. Install plastic edge trim and drip tracks.
- C. Encapsulate exposed insulation edges with base coat reinforcing mesh base coat and finish coat by backwrapping prior to placing insulation boards as specified in coating installation.
- D. Install control joints for every 150 square feet or 30 lineal feet, and at building joints.
- E. Place boards in a method to maximize tight joints. Stagger vertical joints in running bond pattern, stagger and interlock at corners unless approved submittals show different. Butt edges and ends tight to adjacent board and to protrusions.
- F. Secure boards to substrate by adhesive with allowance for moisture drainage [and screws through plastic plates] to achieve a continuous flush insulation surface. [Screw through sheathing into studs or backing. Minimum screw attachment 24 inches horizontally at 12 inch o.c. vertical spacing]. Allow to remain undisturbed 24 hours prior to proceeding with base coat. No adhesive shall remain at surface of insulation.
- G. Sand board irregularities greater than 1/16 inch flush. Rout aesthetic and add feature moldings groove as indicated, do not cut insulation to less than 3/4 inch thickness.

### 3.5 INSTALLATION - COATING

- A. Install primer, air-moisture barrier, drain accessories, base coat, glass fiber mesh reinforcement and finish coating in accordance with approved EIFS manufacturer's written instructions.
- B. Apply base coat to a minimum dry thickness of 1/16 inch in 2 passes and fully embed reinforcement, wrinkle free. Mesh shall not be visible through completed coat.
- C. Lap reinforcement edges and ends 2 inches. Wrap reinforcement around insulation edges at system terminations, penetrations, trim, and control joints extending 2-1/2 inches behind insulation and 2-1/2 inches onto the face of the insulation board.
- D. Install trim and control joints at edges.
- E. Allow base coat to cure before applying finish coat. Apply finish coat with a uniform texture and thickness and color matching approved sample.

### 3.6 INSTALLATION - CONTROL JOINTS AND SEALANTS

- A. Apply EIFS manufacturer approved primer and sealant with backer rod or backer tape to prevent 3-sided adhesion at finish perimeter and control joints in accord with sealant manufacturer directions for conditions of use. Joint width 3/4-inch minimum.
- B. Insulation edges and corners shall be coated with base coat and reinforcing mesh and cured prior to sealant application. Do not apply sealant over finish coat. Sealant shall not come in direct contact with insulation or reinforcing mesh.
- C. Install Joint trim in full lengths to minimize moisture intrusion; cut horizontal trim tight to vertical trim.
- D. Install backer rods into edge joints and tool sealant into full contact with joint edges without protruding beyond finish EIFS surface.

### 3.7 CLEANING

- A. Remove any EIFS coating and soil from adjacent non-coated surfaces.
- B. Remove left over material, masking and debris from the job site resulting from EIFS work.

### 3.8 PROTECTION OF FINISHED WORK

- A. Protect and keep dry surrounding areas and surfaces until complete finish is cured and edges are sealed and flashed so water cannot infiltrate behind the system.

### 3.9 TOLERANCES

- A. Completed work surface flat plane: 1/8 inch in 10 feet maximum variation.

### 3.10 SCHEDULES

- A. Exterior Walls: Wall type "1": insulation 3" inches thick screw attached to metal Z clips, reinforcement and coating finish; smooth sand finish in color to match existing adjacent concrete panels.

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- B. Ground Floor: Additional heavy impact mesh to 8 foot high feature molding.

END OF SECTION



## STEEL DOORS AND FRAMES

## PART 1. GENERAL

## 1.1 GENERAL

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paints may be present on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the work area. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.

## 1.2 RELATED SECTIONS

- A. Section 01045 – Cutting and Patching
- B. Section 08 71 00 – Door Hardware
- C. Section 08 80 00 – Glazing
- D. Section 09 91 00 – Painting
- E. Electrical: Division 26

## 1.3 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this Specification. The publications may be referred to in the text by basic designation only. In case of conflict the most stringent shall apply.
  - 1. ASTM A568 – Standard Specification for Steel, Sheet, Carbon and High Strength, Low-Alloy, Hot-Rolled and Cold-Rolled, General Requirements for.
  - 2. ASTM A653 – Specification for Steel Sheet, Zinc Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot Dip Process.
  - 3. ASTM A924 – Specification for General Requirements for Steel Sheet, Metallic-Coated by the Hot-Dip Process.
  - 4. ASTM C920 – Standard Specification for Elastomeric Joint Sealants
  - 5. ASTM C1036 – Specification for Flat Glass.
  - 6. ASTM C1048 – Specification for Heat-Treated Flat Glass – Kind HS, Kind FT Coated and Uncoated Glass.
  - 7. ASTM C1172 – Standard Specification for Laminated Architectural Flat Glass.
  - 8. ASTM E2112 – Standard Practice for Installation of Exterior Windows, Doors, and Skylights.

9. ASTM E2190 – Specification for Sealed Insulating Glass Unit Performance and Evaluation.
10. National Fire Protection Association (NFPA) NFPA 80 – Standard for Fire Doors and Windows.
11. NFPA 252 – Standard Methods of Fire Tests of Door Assemblies.
12. Steel Door Institute (SDI) /ANSI A 250.8-Recommended Specifications for Standard Steel Doors and Frames.
13. Steel Door Institute (SDI)/ SDI-105 (ANSI A250.11) – Recommended Erection Instructions for Steel Frames.
14. Underwriters Laboratories (UL) 10C – Positive Pressure Fire Tests of Door Assemblies.
15. National Association of Architectural Metal Manufacturers (NAAMM) Hollow Metal Manufacturers Association Division (HMMA) Standard NAAMM: HMMA 810 – Hollow Metal Doors 820 - Hollow Metal Frames.
16. NAAMM: HMMA – Standard 840 - Installation and Storage of Hollow Metal Doors and Frames.
17. Society for Protective Coatings (SPC) – Systems and Specifications.
18. (NAAMM): HMMA 861 – Guide Specifications for Commercial Hollow Metal Doors and Frames.
19. International Building Code (IBC).
20. ANSI Z 97.1 – Safety Glazing Material Used in Buildings – Safety Performance Specifications and Methods of Test.

#### 1.4 SUBMITTALS

- A. Product Data: For each type of door and frame indicated, include door designation, type, level and model, material description, core description, construction details, hardware locations, reinforcement type and locations, anchorage and fastening methods, label compliance, sound and fire-resistance ratings, and finishes.
- B. Shop Drawings: Show the following
  1. Contractor shall verify door elevations of each door design and submit shop drawing showing elevations.
  2. Details of doors including vertical and horizontal edge details.
  3. Details and locations of internal reinforcement and preparations for hardware.
  4. Coordination of glazing frames and stops with glass and glazing requirements.
- C. Installation Instructions: Manufacturer's published instructions, including any special installation instructions relating to this project.
- D. Manufacturer's Certificate: Certification that products meet or exceed specified requirements
- E. Door Schedule: Use same reference designations indicated.
- F. Indicate frame profile, fire rating, construction, thickness, finish, anchor types and locations, location of cutouts for hardware, reinforcement, glass, and installation-adjustment instructions.
- G. Indicate door elevations, fire rating, construction, thickness, finish, internal reinforcement, construction method at edges, top and bottom, cutouts for glazing, and installation-adjustment instructions.
- H. Provide a schedule of doors and frames using same reference numbers for details

and openings as those on DRAWINGS.

- I. Certificate from Installer that installation meets these SPECIFICATIONS.

#### 1.5 QUALITY ASSURANCE

- A. Manufacturer: Company specializing in manufacturing the products specified in this section with minimum three years' documented experience.
- B. Maintain at the project a copy of all reference standards dealing with installation.

#### 1.6 STORAGE AND PROTECTION

- A. Store in accordance with NAAMM HMMA 840.
- B. Protect with resilient packaging; avoid humidity build-up under covering; prevent corrosion.

### PART 2. PRODUCTS

#### 2.1 STEEL DOORS AND FRAMES:

- 1. Ceco Door Products.
- 2. Curries Company.
- 3. Republic Builders Products.
- 4. Steelcraft.
- 5. Mesker

#### 2.2 DOORS

- A. Requirements for All Doors:

- 1. Accessibility: Comply with ANSI/ICC A117.1.
- 2. Grade: ANSI A250.8 – Level 4 and Physical Performance Level A, Model 2 (seamless/ fully welded).
- 3. Thickness: 1-3/4 inches.
- 4. Door Design: In accordance with SDI 100, Design N, Half Lite.
- 5. Door Top and Bottom: Close with inverted 14 gage minimum end channels or closures.
- 6. Door Edge Profile: Beveled on both edges.
- 7. Door Reinforcement: Comply with ANSI A250.8. Reinforce for surface applied hardware.
- 8. Glazed Lights: Non-removable stops on non-secure side; sizes and configurations as indicated.
- 9. Hardware Preparation: In accordance with DHI A115 Series, with reinforcement welded in place, in addition to other requirements specified in door grade standard.
- 10. Galvanizing: All components A40 hot-dipped zinc-iron alloy-coated (galvannealed) in accordance with ASTM A 653/A 653M, with manufacturer's standard coating thickness.
- 11. Finish: Factory primed, for field finishing.
- 12. Texture: Smooth faces.

- B. Exterior Doors, Non-Fire-Rated:

- 1. Core: Polyurethane
- 2. 14 Gage Minimum

- C. Door frames: Comply with the requirements of grade for door. 14 gauge, Welded, mitered or coped corners, seamless with joints filled. Frames shall be insulated.

## 2.3 ACCESSORIES

- A. Frame Silencers: shop drill holes and provide 3 resilient rubber bumpers, each jamb 3/8 inch diameter for force fit into drilled hole per ANSI A156.16 type L03011.
  - 1. Not required on doors with gaskets or weather strip.
- B. Glazing Stops: rolled steel channel wrap-around shape height and mitered corners for thickness of glass required to allow U.L. or W.I.I. fire label: Countersunk, corrosion resistant tamperproof screws.
- C. Concealed wireways: sheet metal block out around frame mounted electrical devices with wire-way to single location at frame head.

## 2.4 HARDWARE

- A. Coordinate Hardware with Section 08 71 00 – Door Hardware.

## PART 3. EXECUTION

### 3.1 EXAMINATION

- A. Verify existing conditions before starting work. Contractor should verify proper door swings. Door swings for handings are shown from outside the room looking in.
- B. Verify that opening size and tolerances of the existing doorframe. Notify project managers when opening does not fall within tolerance and make frame adjustments per SDI 122-99.

### 3.2 INSTALLATION

- A. Install in accordance with the requirements of the specified door grade standard and NAAMM HMMA 840.
- B. Install fire rated doors in accordance with NFPA 80.
- C. Coordinate installation with existing frame and opening conditions. Fit doors accurately in their respective existing frames, within clearances specified in ANSI A250.8 – SDI-100. Contractor will field verify proper door sizes and hinge locations with supplier before ordering.
- D. Coordinate installation of hardware. Contractor should verify proper door swings. Door swings are shown from outside the room looking in. Modify strike plate has required for proper installation of new door hardware.
- E. Coordinate installation of glazing.

### 3.3 FINAL CLEANING AND ADJUSTMENTS

- A. Check hollow metal work prior to final inspection. Leave work in complete and proper operating condition. Adjust for smooth and balanced door movement. Remove and replace defective work, including doors that are warped, bowed, or otherwise damaged.

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- B. Immediately after erection, sand smooth any rusted or damaged areas of prime coat and apply touch-up of compatible air-drying primer.
- C. All doors shall be left free of dirt, grease or other deleterious materials.

END OF SECTION



DOOR HARDWARE

PART 1. GENERAL

1.01 NOTIFICATIONS OF POTENTIAL HAZARDS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

1.02 NOTIFICATIONS OF CHILD OCCUPIED FACILITY

- A. Portions of this building are classified as a child occupied facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.

1.03 SUMMARY

- A. Work under this section includes the door hardware requirements for the project. Hardware schedule is based on wood doors, hollow metal doors, and metal frames. Quantities listed are for the contractor's convenience and are not guaranteed. Items not specifically mentioned, but necessary to complete the work, shall be furnished, matching the items specified in quality and finish.

1.04 RELATED REQUIREMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specifications, apply to this Section
- B. Related Sections
  - 1. Section 01045 – Cutting and Patching
  - 2. Section 08 11 00 – Steel Door and Frames
  - 3. Section 08 80 00 – Glazing
  - 4. Section 09 91 00 – Painting
  - 5. Electrical: Division 28

1.05 REFERENCES

- A. Reference Standards: Current edition at date of bid
- B. ANSI/BHMA A156.18 - Materials and Finishes
- C. ICC/ANSI A117.1 - Accessible and Usable Building and Facilities
- D. NFPA-80 Standard for Fire Doors and Window
- E. Underwriters Laboratories - Building Materials Directory
- F. Underwriters Laboratories Test Standard UL 10C-98 - Positive Pressure Fire Test of Door Assemblies.
- G. UL10C - Positive Pressure Fire Tests for Door Assemblies
- H. Architectural Door Hardware for Standard Steel Doors and Frames

1.06 SUBMITTALS

- A. General Requirements: All Submittals shall be in accordance with Section 01300, Submittals.
- B. Product Data: Submit and upload one (1) electronic copy of manufacturer's data for each item of door hardware to the ProCore\Submittals.
- C. Hardware Schedule: Submit and upload one (1) electronic copy of a detailed Door Hardware Schedule to the ProCore\Submittals.
  - 1. Indicate complete designation of every item required for each door or opening.
  - 2. Furnish cover sheet listing title of project as shown on Contract Documents, name, address, phone and fax numbers of Owner, Architect, Contractor, and Supplier, name of Certified Hardware Consultant, and date of submittal.
  - 3. List each opening individually under separate headings in same order as door schedule. Do not group like or similar doors under a single heading. Do not continue headings on separate pages.
  - 4. At each heading, indicate hardware group numbers, opening location, handing, active door, degree of opening, door name, size, type, fire rating, and Door and Frame material.
  - 5. Indicate product manufacturer and incorporate cross-reference to symbols used in Hardware Schedule attached to this Section.
  - 6. Include locations for miscellaneous items.
  - 7. Cross reference abbreviations or symbols used.

8. Index door number, heading, page number, and locking function of each opening.
9. Schedules in coded or horizontal format are not accepted.
10. Submittals not conforming to these requirements will be returned without review, for re- submittal. Following is an example of required format for each opening:

<b>Double Exterior Door #100 - Exterior Main Entry Vestibule 100 to Interior Vestibule 100 - RH 120°</b>				
3-0 x 7-0 x 1-3/4" x Non- x Type A- SC WO x HMF Rated				
<b>Number</b>	<b>Type</b>	<b>Model</b>	<b>Finish</b>	<b>Manufacture List</b>
1	Exit Device	EL 98 x 990 DT	626/US26D	VO
1	Exit Device	EL 98 x 990 NL	626	VO
1	Cylinder	12 E 72S2RP, rim type	626	BE
1	Cylinder	1E74-C4, mortise type (keyed mullion)	626	BE
1	Cylinder	1E74 - C4, mortise type (key switch)	626	BE
1	Door Closer/Hold Open Arm	4040XP-3049SCNS	AL	LCN
1	Door Operator	4642 Long	AL	LCN
2	Door Actuator	4642		LCN
2	Continuous Hinge	A5500 PT	ss	ABH
1 Pair	Jamb Gaskets	2891 APK (including mullion)		PE
1	Head Gasket	2891 APK		PE
2	Door Sweep	315CN		PE
2	Kickplate	K1050 B4ELTDW 630	630	RW
1	Threshold	WS437-150	626/US26D	GR
1	Mullion	KR 4954 7' SP28		VO
1	Mullion Stabilizer	154		KR
1	Mullion Gasket	NGP 5100N86		
1	Mullion Storage Kit	MT54	SP28	VO
2	Power Transfer	EPT-10		VO
1	Switch Retrofit Kit	LX or LS/LC (per electrical requirements)		

11. Processing: Hardware schedules will not be reviewed by Architect until they have been reviewed and approved by the Contractor. Resubmit only corrected copies of those sheets requiring correction and update distributed copies with corrected sheets.
12. Modifications: Update Hardware Schedule and keep current throughout the project duration.
  - a. Incorporate revisions conforming to specified requirements.
  - b. Submit only cover sheet and revised pages.
  - c. Clearly identify changes from previous submittal content.

13. Owner's Representative will review and approve final submittal. Before approved, send one copy to:  

Anchorage School District, Maintenance Department / Lock Shop  
1301 Labar Street  
Anchorage, AK 99515
14. Review of hardware schedule does not relieve Contractor of responsibility to fulfill project requirements in accordance with the Contract Documents.
15. Affidavit of Coordination: Letter signed by an approved hardware consultant stating they have reviewed the drawings and specifications and have coordinated the hardware for completeness, substrates, conditions of the project. **SUBMITTSLD WITHOUT AFFIDAVIT WILL BE RETURNED UNREVIEWED.**
16. Submit Certified DHI Level Three: Advanced Technical expertise qualification and certificate; Door and Hardware Consultant (DHC) or Door and Hardware Specification Consultant (DHSC) or Access Control Systems Consultant (ASCS).

D. Wiring Diagrams:

1. Submit one (1) electronic copy of electronic hardware system riser and terminal-to-terminal wiring diagrams for each Electronic Hardware application, cross-referenced to Door Hardware Submittal, Door Schedule.
2. Include voltage requirements along with product data and installation instructions.
3. Indicate connection points to equipment provided under Division 26.

E. Operations and Maintenance Data:

1. Submit Maintenance and Operations Manuals under provisions of Division 1, Operation and Maintenance Data.
2. Content: Manuals shall contain a copy of final installed Door Hardware Submittal, product data, templates, parts lists and diagrams, installation and maintenance instructions, wiring diagrams, and Product Warranties.
3. Keying Floor Plan with door numbers, full building plan, electronic copy.

1.07 QUALITY CONTROL

- A. Quantities listed are for Contractor's convenience only and require verification. Provide Items not specifically mentioned, but necessary to complete work, matching items specified.

- B. Supplier:
1. Recognized builders' hardware supplier who has been furnishing hardware in same area as project for a period of not less than five (5) years.
  2. Factory direct, authorized distributor of Exit Devices, Locksets, and Door Closers.
  3. Employing a hardware consultant, certified by Door and Hardware Institute (DHI), available during course of work to meet and consult with Owner, Architect, or Contractor.
- C. Source: Furnish each kind of hardware from single source manufacturer, except as otherwise specified.
- D. Templates: Furnish hardware templates for each fabricator of doors, frames and other work to be factory prepared for installation of hardware. Upon request, check shop drawings of such other work to confirm that provisions will be made for proper installation of hardware.
- E. Installer:
1. Trained by hardware manufacturer or local trade union jurisdiction in procedures required for a successful installation, conforming to manufacturer's instructions.
  2. Able to document 3 years or more years' experience upon request by Owner's representative.
- F. Codes and Standards:
1. All door hardware shall comply with current applicable local and/or state building codes.
  2. Hardware for fire-rated openings shall also be in compliance with all fire related building codes applicable to the district in which the building is located. Provide only hardware which has been tested and listed by UL for the types and sizes of doors required, and which complies with the requirements of the door and door frame label.

#### 1.08 PRODUCT HANDLING

- A. Packaging:
1. Each item or package is to be separately tagged with identification related to final hardware schedule.
  2. Detailed installation instructions shall be included.

B. Storage:

1. Provide locked room at the job site for storage of hardware.

1.09 WARRANTY

A. Door hardware shall be warranted against defects in workmanship and operation for a period of one (1) year, backed by a factory warranted of the hardware manufacture. The following products shall be warranted for period beyond one (1) year:

1. Locks - 2 years
2. Exit Devices - 5 years
3. Door Closers - 10 years
4. Electronics - 2 years

PART 2. PRODUCTS

2.01 ABBREVIATIONS

ABH	Architectural Builders Hardware
ACSI	Architectural Control Systems, Inc
BE	Best Access Systems (dormakaba Group)
GR	Garadry
LCN	LCN Door Closers (Allegion)
LN	Locknetics
MA	Marks
MC	McKinney
MK	Markar
PE	Pemko Mfg
RI	Rixson
RW	Rockwood
SC	Schlage
ST	Stanley
VO	Von Duprin

2.02 MANUFACTURES AND ACCEPTED SUBSTITUTIONS

A. Manufacturers: Furnish products as specified or accepted substitutions as specified in table below:

Product	As Specified	Acceptable Substitutions
Butt Hinges	McKinney	Stanley, Hager, Ives
Continuous Hinges	ABH 12 Gauge	MK - Markar 12 Gauge
Cylinders & Cores	BEST	None
Locksets	Schlage L9000	None
Thumbturn Cylinder	BEST	General Lock
Exit Devices	Von Duprin 98/99	None

Door Closers	LCN 4040XP Series	None
Flush Bolts/Surface Bolts	Rockwood	Ives/Glynn Johnson
Coordinators	Rockwood	Ives, Trimco
Kick Plates, Push/Pulls	Rockwood	Tice, Trimco, Ives
Wall and Floor Stops	Rockwood/ABH	Ives/ABH, Trimco/ABH
Holdings	ABH	Rixson, Glynn Johnson
Weatherstrip	Pemko	National Guard, Zero
Electrical Switches	ACSI	BEST, Schlage, Von Duprin
Threshold	Garadry	None

- B. Substitution Requests for Unlisted Products: Submit under provisions of Division 1.

## 2.03 FINISH

- A. Finish in general to be US26D, except:
1. Where specifically noted differently.
  2. Closers: SRI Prime/Al or powder coat
  3. Exit Devices: US626 or US32D, satin stainless steel
  4. Locksets: US626 or US32D, satin stainless steel
  5. Thresholds: As listed in schedule

## 2.04 HARDWARE MATERIALS

- A. Fasteners: Provide fasteners for installation with each hardware item. Provide Phillips head fasteners, countersunk oval, flat head, or undercut head as appropriate for material to be installed.
- B. Compatibility: Provide fasteners that are compatible with both units fastened and substrate and that will not cause corrosion or deterioration of hardware, base material, or fastener.
- C. Door stops applied to masonry walls or floors (avoid fixed floor mount stop); provide double expansion shield type anchors. Sleeve anchors may be substituted when approved by the owner for each location.
- D. TEK/Self-Tapping screws are allowed for kickplates, push/pull, and weather stripping. All other uses are not permitted.

## 2.05 BUTT HINGES

- A. Types: Types required are indicated under Hardware Groups and as described below.
1. Sizes:
    - a. Interior doors up to and including 36": Ball Bearing, Standard Weight 3 ball bearing hinges.
- B. Quantity: 1-1/2 pair up to and including 90" in height and/or 36" in width unless noted

otherwise:

1. 2 pair over 90" in height and/or 36" in width.
2. For unusual size or weight doors, furnish type, size quantity recommended by the butt manufacturer, and as listed.

C. All hinges shall have non-removable pins (NRP) set-screw in barrel.

#### 2.06 CONTINUOUS HINGES

- A. Design: 12-gauge stainless steel, Pin and Barrel.
- B. Provide Heavy Duty Stainless Steel continuous hinges prepped as needed by project requirements.
- C. Doors over 36": shall be continuous hinges.

#### 2.07 LOCKSETS (MORTISE)

- A. Types: Schlage L9000 Series are indicated under Hardware Groups and as described below.
- B. Lever Design: Furnish Lever Handle Locksets and Latches in 06L Design.
- C. Ratings: Locksets and Latchsets shall be listed with Underwriters Laboratories for A label and lesser class doors.
- D. Provide extended spindles for doors over 1-3/4" thick.
- E. Strikes: Provide Curved Lip Strikes with adequate projection to protect door trim. Provide flat, flush lip strikes for pairs of doors with overlapping Astragals.
- F. Strike Boxes: Provide manufacturers standard wrought strike boxes

#### 2.08 LOCKSETS (CYLINDRICAL)

- A. Manufacturer listed: Marks 195 Series
  1. Acceptable Substitutions: BEST 9K Series
- B. Backset: 2-3/4" (Refer to each door schedule)
- C. Doors over 1-3/4" thick require special locksets for thicker doors.

#### 2.09 ELECTRICAL SWITCH LOCKS

- A. Manufacture Listed: ACSI
- B. Acceptable substitution switches: Best Access Systems, Schlage and Von Duprin
- C. Type that will accept "SFIC".

2.10 CYLINDERS RIM AND MORTISE

- A. Manufacturer: All lock cylinders shall be manufactured by BEST "Premium" Grandmaster key system, no substitutions.
- B. Type that will accept 7 pin "SFIC".

2.11 CORES

- A. Manufacturer listed: Best Access Systems, 7 pin, interchangeable core, "Premium". Provide typically with all locksets and as listed.
- B. Acceptable substitutions: None.

2.12 EXIT DEVICES

- A. Types: Von Duprin 98 Series are indicated under Hardware Groups and as described below. NOTE: VO 99 (grooved) is acceptable if VO99 hardware is on site to remain.
  - 1. All exterior cylinder dogging shall accept BEST 7 pin SFIC cylinders/cores.
- B. Pair Openings: Furnish two Exit Devices for pair openings.
- C. Rated Openings: Provide UL listed Fire Exit Hardware at rated openings.
- D. Sizes: Provide Exit Devices sized in accordance with manufacturer's recommendations.
- E. Lever Trim: Exit Device Lever Trim shall be similar to design specified.
- F. Provide hex nuts and bolts for all exit devices.

2.13 MULLIONS

- A. Keyed Removable Mullions: Furnish Spacers for installation in narrow stop frames.
- B. Provide a pair of mullion stabilizers KR154 for ALL mullions for exterior doors only.
- C. Mullion Storage Kit MT54 where keyed mullions are used.

2.14 DOOR CLOSERS, FURNISHING

- A. Types: LCN 4040XP Series are indicated under Hardware Groups, and as described below.
- B. Pair Openings: Furnish two Door Closers for pair openings, except as noted in Hardware Groups.
- C. Drop Plates: Furnish drop plates where doors have insufficient height top rails, or where Regular Arm Door Closers are used in conjunction with Concealed

Overhead Stops.

- D. Spacer Blocks: Furnish Spacer Blocks where frame stop does not provide for adequate support for parallel arm soffit shoe.
- E. Special Mounting: Provide special closer mounting as required where interference with weatherstrip or sound seals occurs. Do not cut sound seal or weatherstrip to accommodate door closer shoe.
- F. Provide and/or mount all closers in parallel arm (EDA) configuration unless otherwise noted **(UON)**.
- G. Plastic covers are acceptable.

2.15 KICKPLATES, PUSH AND PULLS

- A. Fasteners: Provide stainless steel Phillips oval/undercut head, full tread type sheet metal screws for fastening not more than 5 inches on center.
- B. Material: Plates shall be .050 Stainless Steel and beveled 4 edges
- C. Provide kickplates 10" in height, typical height.
- D. Size: All kick plates shall be 2" less than door width for single leaf door, except pairs of doors shall be 1-1/2" less than door width. All kick plates shall be not 1-1/2" less than door width on pull side of door. Kick plates shall be 10" in height, standard.
- E. Mounting Height: Mount 1/2 inch from bottom of the door

2.16 STOPS AND HOLDERS

- A. Only install door holders as indicated in the project documents.
- B. Types: Types required are indicated under Hardware Groups and as described below.
- C. Pair Openings: Furnish two stops for pair openings.
- D. Size: Furnish Holders sized as recommended by manufacturer.
- E. Closer Arms: 4040XP-3049SCNS (SHCUSH) closer arm is acceptable.
- F. Special Applications: Furnish Overhead Stop and Holders with special shims, brackets, or special template mounting where required, consult ASD for options.

2.17 THRESHOLDS

- A. Types: As indicated under Hardware Groups and as described below.
- B. Fasteners: Furnish concrete anchor fastening system.

2.18 WEATHERSTRIP

- A. Types: As indicated under Hardware Groups and as described below.

2.19 SOUND SEALS

- A. Types: As indicated under Hardware Groups and as described below.

2.20 MAGNETIC HOLDERS

- A. Types: As indicated under Hardware Groups and as described below.
- B. Vandalism resistant, metal units only. Plastic magnet covers are not acceptable.

2.21 MISCELLANEOUS

- A. Types: As indicated under Hardware Groups and as described below. Provide quantities of miscellaneous items as required for a complete and operational opening.
- B. Provide door silencers for all openings without gasketing/weatherstrip. Provide three (3) for single doors and four (4) for pairs of doors and doors 7'-6" and taller.

2.22 KEYING

- A. Types: A key conference will be conducted with the owner and hardware supplier to determine permanent keying requirements.
- B. Construction Keying: Provide Brass Construction Cores and Keys for all locks during the construction period. Plastic Construction Cores are not acceptable. Construction cores shall remain the property of the hardware supplier and are to be returned after installation of permanent cores.
- C. All cylinders and locks are to be provided with brass 7-pin BEST IC cores.
- D. All keys and cores shall be provided to ASD Maintenance Lock Shop.
- E. Provide one (1) core per lock cylinder.
- F. Key Quantities: Provide three (3) uncut keys for each keyed lock cylinder.
- G. Ship all cores, keys, with quantity of each and labeled per **PROJECT NUMBER, PROJECT NAME AND SCHOOL NAME** via registered mail, return receipt requested to:

Anchorage School District, Maintenance Department / Lock Shop 1301  
Labar Street, Anchorage, Alaska 99515

PART 3. EXECUTION

3.01 PREPARATION

- A. Examination: Examine Doors, Frames, and related items for conditions that would

prevent proper application of Door Hardware. Do not proceed until defects are corrected

- B. Blocking: Provide solid blocking for Wall Stops, Automatic Operators, Wall Plate Actuators, and Magnetic Holders.
- C. Fasteners: Check conditions and use fastening devices such as Riv Nuts needed to securely anchor hardware as per manufacturer's published templates.

### 3.02 INSTALLATION

- A. Mounting Heights: Mount units at heights as recommended in Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames by Doors and Hardware Institute, except as indicated below. Products not specifically covered shall be installed in accordance with manufacturer templates and instructions.
  - 1. Hinges:
    - a. Top Hinge: 7-1/4", Top of frame rabbet to centerline of hinge.
    - b. Bottom Hinge: 12-1/4", Bottom of Frame to centerline of hinge.
    - c. Intermediate Hinges: Centered, equal spacing between top and bottom hinges.
  - B. Continuous hinges: per manufacturers installation instructions.
    - 1. Mortise Lock Strikes: 40", bottom of frame to centerline of Strike.
    - 2. Exit Devices: Per Manufacturers recommendation.
  - C. Installation: Install each hardware item in conformance to manufacturer's instructions.
    - 1. Cutting and Fitting: Wherever cutting and fitting are required to install hardware on surfaces that will be painted or finished at a later time, install each item completely and then remove and store in a secure place. After completion of finishes, re-install each item.
    - 2. Door and Frame Finishes: Do not install surface-mounted items until finishes have been completed on substrate.
    - 3. Fire Rated Openings: Install in accordance with NFPA 80
    - 4. Degree of Opening: Door shall swing to maximum degree that project conditions will allow. The swings indicated on floor plan are intended to depict direction and do not indicate full degree of opening.
    - 5. Exit Devices: Trim Exit Devices to provide 1-1/2-inch clearance between End Cap and hinge jamb stop face and stop applied weatherstrip.

6. Door Closers: Door Closer shall be located to allow maximum degree of opening that project conditions will allow. Door Closer shall not be used to stop door, except for models equipped with an integral stop-on-arm feature.
  7. Overhead Stops: Furnish Overhead Stop and Holders with maximum degree of opening that project conditions will allow. **THE USE OF OVERHEAD STOPS REQUIRE APPROVAL FROM OWNER.**
  8. Floor Stops: Locate Floor Stops at maximum degree of opening that project conditions will allow. Do not locate Floor Stops where they create a hazardous condition. Stops should be located 6 inches away of the strike edge of the door..
  9. Thresholds: Set Exterior Thresholds in a bed of butyl rubber sealant. Completely fill all voids to exclude moisture. Remove excess sealant. Caulk edges and joints. Set threshold so the door sweep butts up against beveled or tapered edge of threshold.
  10. Weatherstrip: Mount and adjust Rigid Jamb Weatherstrip prior to mounting Parallel Arm Door Closers. Weatherstrip shall be installed to provide a continuous seal at head and jambs. Do not notch Weatherstrip for Door Closer shoe. Lower Door Closer Body 1/4 inch to allow for mounting of Soffit shoe on top of weatherstrip. Provide Parallel Arm 5th hole spacer of increased thickness to allow for revised location.
  11. Door sweeps to be installed on the exterior side of the door. Install additional screw(s) within 1 inch of the edges of door.
  12. Smoke Gasket: Completely clean frame and apply gasket in accordance with manufacturer's instructions. Mount Gasket to stop face of Strike Jambs and Headers, Door Rabbet of Hinge Jamb. If Gasket is required to be mounted on door rabbet of Strike Jambs due to Fire labeling requirements, provide Silencers.
- D. Adjustment: Adjust and check each operating item of hardware and each door to insure proper operation or function of every unit. Replace units that cannot be adjusted to operate freely and smoothly.

### 3.03 FINAL ADJUSTMENT

- A. Final Adjustment: Wherever hardware installation is made more than one (1) month prior to Substantial Completion, make a final check and adjustment of hardware items during week prior to Substantial Completion. Clean and lubricate operating items as necessary to restore proper function and finish of hardware and doors.
  1. Adjust door control devices to compensate for final operation of heating and ventilating equipment.
- B. Door Closer Adjustment: After mechanical systems have been balanced, adjust Door Closers to conform to following the most current approved version of ICC/ANSI A117.1 requirements.

1. Closing Speed: With door open 70 degrees, door closer shall be adjusted so that door will take at least three (3) seconds to move to a point where leading edge of door is three inches from latching.
  2. Opening Force: The maximum force for pushing or pulling a door open shall be as follows: (these forces do not apply to force required to retract latch bolts or disengage other devices securing door).
    - a. Fire Doors: The minimum opening force allowable by appropriate authority having jurisdiction.
    - b. Exterior Doors: 8.5 lbf.
    - c. Interior Doors: 5.0 lbf.
- C. Backcheck: Adjust to prevent damage to closer, hardware, door and frame, and wall.
- D. Instruction: Provide instruction to Owner's Maintenance Personnel in proper adjustment and maintenance of hardware.
1. ASD's preference for the hold open arm functionality is tied to the SCUSH option which provides longevity to the door hardware. It is not the intention of ASD personnel to jeopardize security by utilizing the hold open arm functionality to "prop open" doors. Provide instructions on the hold open arm features with ASD security input.

### 3.04 HARDWARE GROUPS

#### A. General exterior doors

1. **HW-1:** Exterior Double Doors Secure Main Entry (main entry exterior vestibule doors that both leafs are electrified) need to coordinate with Electrical see Division 28.

#### **HW-1 East Main Entrance LHR Active**

Number	Type	Model	Finish	Manufacture List
1	Continuous Hinge with Power Transfer	A5500 PT SS	<b>SS</b>	ABH
1	Continuous Hinge	A5500 SS	<b>SS</b>	ABH
1	Electrified Exit Device	RX LX LC QEL 98NL-OP 626 LHR <i>Reuse existing pulls</i>	<b>626</b>	Von Duprin
1	Cylinder Dogging Exit Device	CD 98EO 626 RHR <i>Reuse existing pulls</i>	<b>626</b>	Von Duprin
1	Key Removable Mullion	KR 4954 SP28		Von Duprin
1	Mullion Stabilizers	154		Von Duprin
1	Mullion Storage Bracket	MT54		Von Duprin
1	Power Transfer	EPT-10 SP28		Von Duprin
1	Key Switch	653-14 L2 626	626	Schlage
3	Mortise Cylinder	1E74 626 C4 1 ¼	626	Best
1	Rim Cylinder	12E72 626	626	Best

1	Hold Open Closer with Stop	4040XP SHCUSH 689	AL	LCN
2	Hold Open Closer with Stop	4040XP-3029SCNS SHCUSH	AL	LCN
	Reuse existing Automatic Operator			
2	Kickplate	K1050 B4E 630	630	Rockwood
1	Header Gasket	2891 APK		Pemko
1	Mullion Gasket	5100N86		NGP
2	Door Sweep	315CN		Pemko
1	Threshold	WS437-150		Garadry

2. **HW-2 Exterior Double Doors Secondary Vestibules** (typically off the main corridors for access to playgrounds, parking lots, at all secondary main doors.) need to coordinate with Electrical see Division 28.

**HW-2 South Parking Lot  
LHR Active**

Number	Type	Model	Finish	Manufacture List
1	Electrified Hinge	5BB1 4 ½ x 4 ½ TW8 630	630	Ives
	Reuse Existing Hinges			
1	Electrified Exit Device	RX LX LC QEL 98NL-OP 626 LHR <i>Reuse existing pulls</i> Electrified Exit Device	626	Von Duprin
1	Cylinder Dogging Exit Device	CD 98EO 626 RHR <i>Reuse existing pulls</i>	626	Von Duprin
	Reuse existing Mullion			
1	Key Switch	653-14 L2 626	626	Schlage
1	Mortise Cylinder	1E74 626 C4 1 ¼	626	Best
1	Rim Cylinder	12E72 626	626	Best
2	Hold Open Closer with Stop	4040XP-3049SCNS SHCUSH 689	AL	LCN
2	Kickplate	K1050 B4E 630	630	Rockwood
	Reuse existing Weatherstrip & Threshold			

**HW-3 RELO**  
**LHR Active**

Number	Type	Model	Finish	Manufacture List
1	Continuous Hinge with Power Transfer	A5500 PT SS	SS	ABH
1	Continuous Hinge	A5500 SS	SS	ABH
1	Electrified Exit Device	RX LX LC QEL 98NL-OP 626 <i>LHR Reuse existing pulls</i>	626	Von Duprin
1	Cylinder Dogging Exit Device	CD 98EO 626 RHR <i>Reuse existing pulls</i>	626	Von Duprin
1	Key Removable Mullion	KR 4954 SP28		Von Duprin
1	Mullion Stabilizers	154		Von Duprin
1	Mullion Storage Bracket	MT54		Von Duprin
1	Power Transfer	EPT-10 SP28		Von Duprin
1	Key Switch	653-14 L2 626	626	Schlage
3	Mortise Cylinder	1E74 626 C4 1 ¼	626	Best
1	Rim Cylinder	12E72 626	626	Best
2	Hold Open Closer with Stop	4040XP-3029SCNS SHCUSH	AL	LCN
2	Kickplate	K1050 B4E 630	630	Rockwood
1	Jamb Gaskets incl Mullion	2891 APK		Pemko
1	Header Gasket	2891 APK		Pemko
1	Mullion Gasket	5100N86		NGP
2	Door Sweep	315CN		Pemko
1	Threshold	WS437-150		Garadry

END OF SECTION

## GLAZING

### PART 1. GENERAL

#### 1.1 GENERAL

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paints may be present on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the work area. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.

#### 1.2 RELATED SECTIONS

- A. Section 08 11 00 – Steel Doors and Frames

#### 1.3 APPLICABLE PUBLICATIONS

- A. Publications listed below form a part of this Specification. The publications may be referred to in the text by basic designation only. In case of conflict the most stringent provisions apply.
  - 1. ANSI Z97.1 - Safety Glazing Material Used in Buildings - Safety Performance Specifications and Methods of Test.
  - 2. International Building Code (IBC), Chapter 24.
  - 3. Glass Association of North America (GANA) - Glazing Manual.
  - 4. ASTM C864 - Specification for Dense Elastomeric Compression Seal Gaskets, Setting Blocks, and Spacers.
  - 5. ASTM C1036 - Specification for Flat Glass.
  - 6. ASTM C1048 - Specification for Heat- Strengthened and Fully Tempered Flat Glass.
  - 7. ASTM C1172 - Specification for Laminated Architectural Flat Glass.
  - 8. ASTM D256 – Test Methods for Determining the Izod Pendulum

Impact Resistance of Plastics

9. ASTM D635 – Test Method for Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position.
10. ASTM D785 - Test Method for Rockwell Hardness of Plastics and Electrical Insulating Materials.
11. ASTM D1929 – Test Method for Determining Ignition Temperature of Plastics.
12. ASTM D2843 – Standard Test Method for Density of Smoke from the Burning or Decomposition of Plastics.
13. ASTM E576 – Test Method for Frost Point of Sealed Insulating Glass
14. ASTM E2190 - Specification for Insulating Glass Unit Performance and Evaluation.
15. ASTM E1300 - Practice for Determining Load Resistance of Glass in Buildings.
16. ASTM F1233 - Test Method for Security Glazing Materials and Systems.
17. Consumer Product Safety Commission (CPSC) 16 CFR Part 1201- Safety Standard for Architectural Glazing Material.

1.4 DEFINITIONS

- A. Interspace: Space between lites of an insulation-glass unit that contains dehydrated air or other specified gas.
- B. Sealed Insulating Glass Unit Surface Designations:
  1. Surface 1: Exterior surface of the outer glass lite.
  2. Surface 2: Interspace surface of the outer glass lite.
  3. Surface 3: Interspace surface of the inner glass lite.
  4. Surface 4: Interior surface of the inner glass tile.

1.5 PERFORMANCE REQUIREMENTS

- A. General: Provide glass capable of withstanding thermal movement and wind, snow and impact loads as specified.
- B. Glass Design: Glass thickness designations indicated are minimums. Confirm glass thicknesses using Project loads and in-service conditions. Provide glass lites in the thickness required for various size openings, but not less than thicknesses and in strengths required to meet the following criteria:
- C. Probability of Breakage for Vertical Glazing: eight lites per 1000. Wind Load Duration: Short duration, as defined in ASTM E1300.
- D. Maximum Lateral Deflection: provide thickness that limits center deflection at design

pressure to 1/175 times the short side length or 1 inch whichever is less.

- E. Thermal Movements: Provide glazing that allows for thermal movements resulting from ambient and surface temperature changes acting on glass framing members and glazing components without permanent loss of seals.

#### 1.6 SUBMITTALS

- A. Submit product data in accordance with Section 01300 - Submittal Procedures.
- B. Provide structural and physical product data characteristics, certified lab tests, size limits, special handling and installation requirements.
- C. Provide certifications.
- D. Provide data on glazing sealants and gaskets.
- E. Manufacturer, fabricator, and installer experience qualifications.

#### 1.7 SAMPLES

- A. Submit two samples minimum 12 inch by 12 inch of each different type of glazing proposed.

#### 1.8 QUALITY ASSURANCE

- A. Glass Manufacturer: Minimum 25 similar successful jobs manufacturing and supplying specified products.
- B. Fabricator: Minimum 25 similar successful jobs fabricating sealed glass insulating and security units.
- C. Installer: Minimum 5 similar successful jobs installing glass similar to that used on this job.

#### 1.9 PRE-INSTALLATION CONFERENCE

- A. Convene one week prior to commencing work of this Section.
- B. Require attendance by OWNER'S REPRESENTATIVE, Glazing Supplier, and Glazing Installer.

#### 1.10 CERTIFICATE SUBMITTALS

- A. Glass manufacturer Certificate of Compliance with specified requirements.
- B. Insulating glass unit manufacturer's certificate of compliance with specified requirements.

#### 1.11 TEMPERATURE REQUIREMENTS

- A. Work with temperature between 35 and 55 degrees F., with no moisture present. Maintain temperature by enclosure and heating as necessary for 12 hours prior, during and 24 hours after installation.

1.12 WARRANTY

- A. Provide insulating laminated and security glass manufacturer's 5-year replacement warranty covering obstruction of vision, breakage, seal failure, internal dusting or internal condensation misting of glass units.

PART 2. PRODUCTS

2.1 GLASS MATERIALS

- A. Float glass, per ASTM C1036, transparent flat, Class I, Quality q3 glazing select quality unless otherwise noted.
- B. Laminated Safety Glass: Two heat strengthened glass lites bonded to .060 inch minimum vinyl interlayer, per IBC 2406, ANSI Z97.1, CPSC 16 CFR 1201, ASTM C1172 and ASTM C1048.
- C. Tempered Safety Glass: thick fully tempered per IBC 2406ANSI Z97.1, CPSC 16 CFR 1201, and ASTM C1048, roll wave marks horizontal.
- D. Heat Strengthened Glass: heat strengthened per ASTM C1048, roll marks horizontal.
- E. Manufacturer product names listed to describe appearance and performance. Substitutions in accord with Section 01630 - Product Requirements.
- F. Permanently label glass identifying manufacturer, third party inspection agency, fire protection rating, date; standard complied with, type and glass thickness in accordance with IBC 716 and 2406.

2.2 GLAZING TYPE

- A. Sealed insulated double unit tempered safety glass outboard lite, laminated safety glass inboard lite, total thickness one-inch nominal.
- B. Exterior lite: clear Low-E on surface No. 2: Vitro "Solarban 60", Vitro Architectural Glass [www.vitroglazing.com](http://www.vitroglazing.com), or approved.
- C. Interior lite: clear Low-E surface No. 3 to allow maximum heat/gain; use with clear exterior lite.
- D. Unit requirements:
  - 1. Clear appearance.
  - 2. Winter night U value 0.29.
  - 3. Summer day U value 0.27.
  - 4. Shading coefficient 0.44.
  - 5. Visible light transmittance (VLT) 70 percent.
  - 6. Solar heat gain coefficient: 0.39.

## 2.3 SECURITY GLAZING TYPES

- A. Product 3M S2400: Sealed insulated safety glass laminated with an optically clear polyurethane film with a durable acrylic abrasion resistant coating over one surface, and a UV stabilized pressure sensitive adhesive on the other. The film's color is clear. The film has a nominal thickness of 24 mils (0.024 inches). There are no observed adhesive coating voids.

### Film Properties (typical):

1. Tensile Strength (ASTM D882): Coated Film: 3200 psi (MD) / 3200 psi (TD)
  2. Break Strength (ASTM D882): Coated Film: 77 lb/in (MD) / 77 lb/in (TD)
  3. Percent Elongation at Break (ASTM D882): Coated Film: 560 % (MD) / 560% (TD)
  4. Graves Tear Resistance (ASTM D1004):
    - a. Maximum Force (lbs): Coated Film: 13 (MD) / 13 (TD)
    - b. Maximum Extension (in): Coated Film: 3.25 (MD) / 3.25 (TD)
    - c. Graves Area Tear Resistance (lbf-in): Coated Film: 24.6 (MD) / 24.6 (TD)
- B. Glass Unit requirements:
1. Clear appearance.
  2. Winter night U value 0.29.
  3. Summer day U value 0.27.
  4. Shading coefficient 0.44.
  5. Visible light transmittance 70 percent.

## 2.4 GLAZING ACCESSORIES

- A. In accordance with glass manufacturer recommendations compatible and coordinated with glass surround pockets and as required for fire resistance including at least:
1. Setting Blocks: elastomeric 85 plus or minus 5 Shore A durometer hardness; per ASTM C864, minimum 6 inches long.
  2. Edge Blocks: Elastomeric 55 plus or minus 5 Shore A durometer hardness; per ASTM C864.
  3. Glazing Spacer-Splines: Elastomeric 65 plus or minus 5 Shore A durometer hardness; shape to suit glazing pocket per ASTM C864.
  4. Weep hole with baffle sponge.
  5. Glazing Tape: Preformed butyl or polyisobutylene-butyl resilient compound; Tremco or Norton. Coiled on release paper; color black.
  6. Gaskets: Interior closed cell neoprene and exterior EPDM. Color: Black.

PART 3. EXECUTION

3.1 EXAMINATION

- A. Examine DRAWINGS and field conditions to receive glass for defects that will adversely affect the work and for deviations beyond allowable tolerances.
- B. Ensure paint finish is complete over wood and steel glazing pockets and stops.
- C. Beginning of installation, mean acceptance of surfaces as capable of producing an acceptable job.

3.2 PREPARATION

- A. Clean the glazing channel in framing members immediately before glazing. Remove lacquer from anodized aluminum surfaces where sealants are used.
- B. Verify frame dimensions to fit glazing.

3.3 INSTALLATION

- A. Apply sealants, tapes, gaskets, setting blocks, edge blocks, spacer-splines, and other items necessary in accord with GANA manual, and glass manufacturer's written instructions for a resilient, weathertight installation.
- B. Cut glass accurately to fit openings with proper tolerances and edge bite.
- C. Provide for expansion, contraction, seismic, vibration, weep holes, and wind movement with permanent bite.
- D. Inspect each piece of glass immediately before installation, and eliminate pieces, which have observable edge damage or face imperfections. Install glass with waves parallel to horizon.
- E. Install in such a manner that glass will remain permanently in position without water leakage or air infiltration. Seal with silicone sealant.

3.4 CLEAN UP

- A. Clean glass and surrounding materials immediately after installation. Do not use abrasives.
- B. Remove excess tape and sealant from glass and surrounding areas.
- C. Remove temporary shipping labels and polish glass clean.

3.5 GLAZING LOCATION SCHEDULE

- A. Interior Doors and Interior Windows: (except install fire and safety rated glass at fire rated doors and fire rated interior corridors): 1/4 inch clear tempered single safety glass.
- B. As indicated on DRAWINGS.
- C. Security Glass Locations as indicated on DRAWINGS.

END OF SECTION



## PAINTING

### PART 1 - GENERAL

#### 1.1 GENERAL

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead, are also present in settled and concealed dust in and on architectural, structural, mechanical and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paints may be present on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the work area. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. This notification is provided in accordance with EPA and OSHA requirements.

#### 1.2 RELATED SECTIONS

- A. Section 01045 – Cutting and Patching
- B. Section 08 11 00 – Steel Doors and Frames

#### 1.3 APPLICABLE PUBLICATIONS

- A. Publications listed below form a part of this Specification. Publications may be referenced in the text by basic designation only. In case of conflict the most stringent apply.
  - 1. ASTM D16 – Standard Terminology for Paint Related Coatings, Materials, and Applications.
  - 2. ASTM D610 – Practice for Evaluating Degree of Rusting on Painted Steel Surfaces.
  - 3. ASTM D714 – Test Method for Evaluating Degree of Blistering of Paints.
  - 4. ASTM D 2485 – Test Methods of Evaluating Coatings for High Temperature Service.
  - 5. ASTM D2486 – Test Method for Scrub Resistance of Wall Paints
  - 6. ASTM D3359 – Standard Test Methods for Measuring Adhesion by Tape Test.
  - 7. ASTM D4060 – Test Method for Abrasion Resistance of Organic Coating by the Taber Abraser.

8. ASTM D4442 - Test Method for Direct Moisture Content Measurement of Wood and Wood-Base Materials
9. ASTM D4541 – Test Method for Pull-Off Strength of Coatings Using Portable Adhesion-Testers.
10. ASTM D5894 – Practice for Cyclic Salt Fog/UV Exposure of painted Metal.
11. ASTM D6677 – Standard Test Method for Evaluating Adhesion by Knife.
12. Society for Protective Coatings/Steel Structures Painting Council (SSPC) - Standards and Specifications.
  - a. SSPC-SP 1 – Solvent Cleaning.
  - b. SSPC-SP 2 – Hand Tool Cleaning.
  - c. SSPC-SP 3 – Power Tool Cleaning.
  - d. SSPC-SP5/NACE No. 1, White Metal Blast Cleaning.
  - e. SSPC-SP6/NACE No. 3, Commercial Blast Cleaning.
  - f. SSPC-SP7/NACE No. 4, Brush-Off Blast Cleaning.
  - g. SSPC-SP10/NACE No. 2, Near-White Blast Cleaning.
  - h. SSPC-SP11, Power Tool Cleaning to Bare Metal.
  - i. SSPC-SP12/NACE No. 5, Surface Preparation and Cleaning of Metals by Waterjetting Prior to Recoating.
  - j. SSPC-SP13/NACE No. 6, Surface Preparation for Concrete.

#### 1.4 DEFINITIONS

- A. Conform to ASTM D16 for interpretation of terms used in this section.

#### 1.5 SUBMITTALS

- A. Provide product data on all coating and finishing products; indicating application instructions including: surface preparation, undercoating, reducing, and certification that product is “Best Line - Premium Grade”.
- B. Submit full range deep tone colors, pastel colors, and stains available from an acceptable paint manufacturer for selection of samples.
- C. Submit sample 1 by 2 inch minimum size illustrating range of colors and texture available for each surface-finishing product.
- D. Submit samples of selected colors representative of actual work as follows:
  1. Minimum size: 3 by 3-inches.
  2. Stain Colors: prepare on wood complete with transparent topcoat if scheduled.
  3. Approved samples shall become final criteria for evaluating color and appearance of completed work.
  4. One set of approved samples shall be kept on the job.
  5. Identify each sample as to finish, formula, color name, and number.
- E. Submit manufacturer and applicator experience data with project owner phone numbers.

- F. Submit V.O.C. compliance certificate.

#### 1.6 QUALITY ASSURANCE

- A. Product Manufacturer: Company specializing in manufacturing paint and coating finish products with 25 jobs similar in scope to work proposed.
- B. Applicator: Specializing in commercial painting and coating application with at least 10 successful jobs similar to that proposed.
- C. Verify coating thickness per manufacturers' instructions using an approved dry film coating testing instrument.
  - 1. Make 5 separate spot measurements where directed with 3 gage readings made for each location.
  - 2. The average of 5 spot measurements shall not be less than the specified thickness.
- D. Paint applicator shall certify the following:
  - 1. Immediately before painting, surfaces conformed to the specified preparation; they were in the specified condition; and were clean, dry, and free of dust, rust, and mill scale to the degree required by this Specification.
  - 2. Surface preparation and coating use, mixing, application, and curing were done in accordance with the current printed instructions and instructions of the coating manufacturer, and these Specifications.
  - 3. The products specified were used or a listing of the names of the products used and their manufacturer was submitted and approved.
  - 4. The products were used within the shelf-life dates of each container of each product used.
  - 5. The manufacturer's recommended dry film thickness of coatings on the work.
  - 6. Compatible paints were used where coatings are applied over previously applied coatings.

#### 1.7 INDOOR AIR QUALITY

- A. Before painting inside building coordinate with User to operate building permanent ventilation system at maximum outdoor airflow before mixing and applying paint, and for minimum 72 hours after application.

#### 1.8 REGULATORY REQUIREMENTS

- A. Conform to International Building Code (IBC) for flame, fuel, smoke-rating requirements for completed finishes.

#### 1.9 DELIVERY, STORAGE AND HANDLING

- A. Store and protect products as recommended by paint manufacturer.

- B. Deliver products to site in sealed and labeled containers.
- C. Container labeling shall include manufacturer's name, type of paint, brand name, manufacture data, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing.
- D. Store paint materials at ambient temperature of 45 degrees F to 90 degrees F in well ventilated area, unless required otherwise by manufacturer's instructions. Only materials to be consumed within a 24-hour work period allowed at work site.
- E. Take precautionary measures to prevent fire hazards and spontaneous combustion.

#### 1.10 TEMPERATURE AND HUMIDITY REQUIREMENTS

- A. Provide continuous ventilation and heating equipment to maintain paint products and substrate dry and at ambient temperatures between 50 and 85 degrees F. for 24 hours before, during and 48 hours after application of finishes, unless permitted otherwise by coating manufacturer's recommendations.
  - 1. Provide temperatures by temporary scaffold enclosures and heating as necessary.
- B. Do not apply exterior coatings during rain or snow, or when relative humidity is above 65 percent, unless permitted otherwise by coating manufacturer's recommendations.
- C. Provide lighting of 80 feet candles at work. Building lights may be used.

### PART 2. PRODUCTS

#### 2.1 ACCEPTABLE MANUFACTURERS

- A. Use first line materials of the following manufacturers, and as further listed below:
  - 1. Benjamin Moore
  - 2. ICI
  - 3. Sherwin Williams
  - 4. Parker Paint
  - 5. PPG
  - 6. Or Approved Equal
- B. Use products of the same manufacturer for succeeding coats of particular applications.

#### 2.2 MATERIALS – AIR QUALITY

- A. Conform to governing regulations including Federal and State requirements for pollution, safety and health.

#### 2.3 PAINT MATERIALS

- A. Provide compatible products in accordance with approved paint manufacturer including paint, varnish, stain, enamel, lacquer, fillers and related products for prime, intermediate and finish coats.

- B. Accessory material not specifically indicated, but required, such as shellac, reducers, undercoats, primers, putty and the like, shall be of quality not less than required by applicable Specification Standards and recommended by the finish coat manufacturer in writing for compatibility and conditions of use.
- C. Paints containing lead shall not be used.
- D. All products "PREMIUM GRADE" for professional trade sales recommended by paint manufacturer for the conditions of use.
- E. Mixing
  - 1. Furnish ready-mixed products except as otherwise specified.
  - 2. Follow manufacturer's directions for:
    - a. Field-mixing of pastes and powders.
    - b. Field-catalyzing components.
  - 3. Coatings shall have good flowing application properties, capable of drying, or curing free of streaks or sags and yielding finish specified.

### PART 3. EXECUTION

#### 3.1 GENERAL

- A. Coordinate time and areas of work with OWNER. Allow for building occupancy during work.

#### 3.2 EXAMINATION

- A. Verify that surface and substrate conditions are ready to receive work as specified and as recommended by the paint manufacturer. Report any conditions that may adversely affect proper paint application.
- B. Examine DRAWINGS, SPECIFICATIONS, and field conditions to determine extent of painting as required.
- C. Beginning of application means acceptance of existing surfaces.

#### 3.3 PROTECTION

- A. Protect elements surrounding the work of this section from damage or disfiguration.
- B. Mask and shut down heat and ventilation intakes when painting adjacent exterior surfaces.
- C. Repair damage to other surfaces caused by work of this Section.
- D. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.
- E. Protection of work when stopping for the day:

1. Erect barriers and post warning signs. Confirm that no dust generating activities will follow shutting down for the day.

#### 3.4 ITEMS NOT TO BE PAINTED

A. The following items shall be masked and not painted unless specifically scheduled:

1. Finished surfaces such as hardware trim, anodized aluminum, glass, stainless steel, bronze and the like.
2. Moving equipment wearing surfaces.
3. Equipment data plates, manufacturer's permanent maintenance labels and fire door and jamb labels.

#### 3.5 PREPARATION

A. General: Clean and prepare substrate for finish as specified and as recommended by coating manufacturer for conditions of use.

B. Clean surfaces and correct surface defects.

1. Remove oil-grease and mildew with detergent or SSPC-SP1 cleaning solvent first (do not use paint thinner, hydrocarbons, or turpentine as they leave residue).
2. Remove dirt, dust, loose material, rust-scale, oil-grease, mildew, release agents, non-adhering paint by grit blast, pressure water blast, sand papering, grinding, scraping or wire brushing.
3. Sand paper thick and sharp edges of shop and existing paint and runs to smooth featheredge.
4. Lightly sand or abrade surfaces dull to insure adhesion.
5. Fill or sand out cracks, holes, pits and scratches, smooth to match adjacent finish.
6. Remove sanding dust prior to painting.

C. Doors Scheduled for Painting: Paint top and bottom edges with paint after door fitting.

#### 3.6 EXISTING PREVIOUSLY COATED SURFACES

A. After preparation as specified check for paint compatibility by applying a 2 to 3 square foot test patch of the proposed coating systems over existing sound coating. Allow to dry 7 days and test adhesion per ASTM D6677, ASTM D4541 or ASTM D3359. If adhesion fails: a different coating or complete removal of existing coating is required.

#### 3.7 APPLICATION

A. Apply coatings to all visible exposed surfaces scheduled in accordance with approved coating manufacturer's instructions and approved submittals for the conditions of use.

- B. Do not apply finishes to surfaces that are not clean, dull, and dry.
- C. Apply each coat to uniform finish.
- D. Sand or abrade lightly and clean between coats to achieve adhesion if recommended by coating manufacturer.
- E. Allow applied coat to dry before next coat is applied
- F. Apply materials so that the following results are obtained.
  - 1. Smooth uniform appearance, underlying paint edges feathered, free of brush marks, uneven orange peel, sags, runs or foreign matter.
  - 2. Complete coverage without skips or streaks and without heavy build-up in details.
  - 3. Close match with approved color.
  - 4. Sharp edges at adjoining materials or at color changes.
  - 5. Work stain finishes thoroughly into wood by brushing or rolling.
- G. Inspection of Coats: Do not apply additional coats until each completed coat has been inspected by the ARCHITECT/OWNER.
  - 1. Only inspected and approved coats of paint shall be considered in determining number of coats applied.
  - 2. Refinish entire surface if coat is not acceptable.

### 3.8 CLEANING

- A. As Work proceeds, promptly remove excess paint products where spilled, splashed or spattered.
- B. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials and debris.
- C. Remove waste, cloths, and material, which may constitute fire or V.O.C. hazard daily from site.
- D. Leave surfaces not required to be finished under this section undamaged and clean and free of paint products from work of this Section.

### 3.9 COATING SCHEDULE

- E. General:
  - 1. For the purposes of this schedule each coat shall be at least dry to the touch before proceeding with the following coat.
  - 2. Coating materials shall be recommended by manufacturer for condition of use and compatible with undercoats.

3. Minimum number of coats is scheduled. Apply additional finish coats as necessary to provide uniform appearing coverage.
4. Refer also to DRAWINGS and Finish Schedule.
5. Sherwin Williams products are referenced. Other manufacturers having similar specifications meeting Quality Assurance specifications may be used.

3.9 COLOR SCHEDULE

- A. Unless otherwise specified, refer to the Drawings.
- B. Match adjacent surface color for the following:
  1. New steel doors.

END OF SECTION

## BASIC ELECTRICAL REQUIREMENTS

## PART 1 GENERAL

## 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

## 1.2 SUMMARY

- A. This section includes general requirements for electrical installation and is applicable to all Division 26, 27 and 28 Sections.
- B. The electrical equipment and installation shall comply with all provisions and requirements of this specification, as well as any and all applicable national, state and local codes and standards.

## 1.3 SCOPE OF WORK

- A. Provide all labor, equipment, materials, and services required for a complete design, permitting, installation, testing, and startup of all systems denoted on the plans and specifications.
- B. Bring questionable or obscure items, apparent conflicts between plans, specifications, governing codes or utilities regulations to the attention of the Project Manager in writing using the standard Request for Information (RFI) Format.
- C. Existing project conditions can be determined prior to bid of the project by site inspection and review of available as-built drawings. As-built information is available for review at Anchorage School District Plans Room. 1301 Labar St. Anchorage, Alaska 99515.
- D. Coordinate all work with Project Manager.

#### 1.4 PERMITS AND FEES

- A. Submit documents and pay all fees required to obtain permits required by local and state agencies for all work required.
  - 1. Contract drawings and specifications are not final design; they provide the minimum design criteria. Provide shop drawings to detail work as required for review, planning, and installation as required. Electrical drawings and diagrams are not intended to show all features of work; however, the Contractor shall provide all product necessary for a complete, functional and fully operational access control system and intercom video system in accordance with equipment manufacturer, NFPA 70 (National Electrical Code) and all municipal requirements.

#### 1.5 ELECTRICAL DRAWINGS AND SYMBOLS

- A. Contract Drawings are not final design drawings. Provide shop drawings to detail work as required for detailed review, planning, and installation as required.
- B. Electrical drawings are diagrammatic and are not intended to show all features of work. However, the Contractor shall provide products necessary for a complete and operable system in accordance with NFPA 70 (National Electrical Code) and the product manufacturers requirements.
- C. Install electrical items that are not dimensioned in a manner to provide symmetrical appearance. Do not scale drawings for exact equipment location. Adjust work to conform to actual conditions for a complete installation.
- D. The drawings and specifications are complementary. Refer to specifications for description outlining products to be provided.
- E. Drawing symbols used for basic materials, equipment, etc., are denoted by industry standard symbols. Special items are denoted by symbol legend or called out on the drawings or specification.

#### 1.6 DEFINITIONS

- A. "BASIS OF DESIGN" - Particular specialized products around which a system was designed. In such cases, the products specified may be critical with regard to physical sizes and performance characteristics. Where variations or substitutions to products are made, the Contractor is solely responsible for resolving all impacts of such a deviation. Approval of a substitution and/or variation request does not relieve the Contractor of responsibility for complying with the design intent.
- B. "CALL OUT" - Products specifically denoted by manufacturer's model and part number, or referenced standards listed on the drawings without further specification. In these cases the Contractor shall provide the products and/or perform in accordance with the references listed.
- C. "EQUAL" - A product, system or installation which:
  - 1. Meets or exceeds all ratings, performance characteristics, standard features and denoted options of specified item.
  - 2. Includes primary characteristics identified in the drawings and specifications.
  - 3. Complies with requirements similar to the "Basis of Design."
  - 4. Is produced by a manufacturer specifically listed as an acceptable manufacturer on the drawings, or in the specifications.

5. Is acceptable and approved to the Architect/Engineer specifically addressed in writing.
- D. "EXPOSED" - Exposed to view after construction is completed.
- E. "FURNISH" - Purchase materials as shown and specified. Deliver to project site at location shown to be installed by supporting crafts.
- F. "INSTALL" - Set in place and connect equipment furnished by others for a complete and ready to use installation.
- G. "PRODUCT" - Term which includes materials, equipment, fixtures, and devices for any tangible item used on the project.
- H. "PROJECT MANAGER" – Individual employed and designated by the Anchorage School District.
- I. "PROVIDE" - Furnish all products, equipment, subcontracts, labor, testing, etc., required and install for a complete ready to use installation.
- J. "SHOP DRAWING" - Detailed, dimensioned working construction drawing drawn to a particular scale adequately showing installation intent, details and coordination of interrelated trades.
- K. "SUBSTITUTION" - A product, system or installation which is not listed as an acceptable manufacturer, but the Contractor warrants meets or exceeds specified equipment denoted in the contract documents. Approval through submittal process is required prior to purchase to establish product or system is "equal".
- L. "WIRING" - Electrical conductors, raceway, devices, connections and associated accessories, or any combination of labor and material thereof in order to provide a complete and operable system.
- M. "WEATHERPROOF" - Electrical equipment noted as weatherproof or "WP" shall be provided with raintight enclosures or device plates as applicable and approved for wet location by listing or label.

#### 1.7 COORDINATION

- A. Exposed Raceways and Cables where specifically allowed shall be routed in such a manner agreeable to the Project Manager. Coordinate all such work prior to installation.
- B. Coordinate the work specified in this Division under the provisions of Division 1.
- C. Obtain written permission from Project Manager prior to cutting, drilling or weakening structural components.

#### 1.8 PAINTING AND REPAIR

- A. All building materials, equipment and existing furniture damaged during the installation of the work shall be repaired or replaced with materials in like kind and quality of the original by skilled labor experienced in that particular building trade.

- B. Items scratched or marred in shipment or installation shall be refinished with touchup paint selected to match installed equipment finish.
- C. Contractor to replace all ceiling tiles or metallic ceiling slats that are damaged during removal and replacement.

#### 1.9 CODES AND STANDARDS

- A. Codes: Perform all work in accordance with all latest legally enacted editions of National, State and Local codes including:
  - 1. NFPA 70 - National Electrical Code (NEC).
  - 2. NFPA 72 - Fire Alarm Design and Installation Requirements.
  - 3. International Building Code (IBC).
  - 4. International Fire Code (IFC).
  - 5. International Mechanical Code (IMC).
  - 6. Accessible and Usable Buildings and Facilities (ICC/ANSI A117.1)
- B. Standards: Provide all equipment, materials and installation in conformance with the following latest current publications and standards as applicable:
  - 1. Underwriter's Laboratory (UL).
  - 2. American National Standards Institute - ANSI.
  - 3. American Society of Testing and Materials - ASTM.
  - 4. Institute of Electrical and Electronics Engineers - IEEE.
  - 5. National Electrical Manufacturers' Association - NEMA.
  - 6. National Fire Protection Association - NFPA.
  - 7. National Electrical Contractors Association - NECA

#### 1.10 SUBMITTALS

- A. Provide submittals for products or systems specified by call out, equipment list items shown on the drawings and products, equipment or systems described in Division 26 Specifications. Submittals shall comply with all requirements of Division 1 Section 01300. In addition, submittal shall comply with the following:
  - 1. Each submittal copy shall be submitted to ASD through Procore construction management software for their review
    - a. Each submittal shall clearly indicate the job reference.
    - b. Submittals shall be organized in a clear manor.
    - c. Material shall be arranged in ascending numerical order by specification number.
  - 2. Submittal shall provide the following for each item submitted on at a minimum:
    - a. Manufacturer's name, addresses, nearest supplier addresses and phone number.
    - b. Equipment designation and/or model number.
    - c. Submit catalog cuts, printed product data, pamphlets and specification sheets.
    - d. Rough-in data and dimensional aspects.
    - e. Operational features, included options and characteristics.
    - f. Wiring diagrams.
    - g. Shop drawings.
    - h. Documentation denoting equipment is listed by a third party testing organization acceptable to the authority having jurisdiction.
    - i. All proposed substitutions and deviations from the products or systems specified shall be denoted as such at the beginning of each section. Each deviation shall be specifically itemized for comparison to specified equipment. Submittal approval does not include any deviations not

specifically itemized. Substitution submittal approval does not relieve the Contractor of responsibility for complying with design intent. Unapproved products or installation deviations shall be corrected as described by the Project Manager.

- j. Delete all extraneous material data from submittal which does not apply to equipment specified and/or highlight the specific items which are being submitted on.
3. Submittal review is for general design criteria and does not relieve the Contractor from any of the contract requirements.

#### 1.11 QUALITY ASSURANCE

- A. Workmanship is considered important and is subject to approval. National Electrical Contractors Association (NECA) standards of installation will be enforced as a minimum quality level. Employ workmen skilled in the trade and familiar with particular techniques applicable to various sections of work.
- B. Provide all Materials to conform with applicable industry standards and Underwriters Laboratories standards. Whenever possible, similar items shall be supplied by the same manufacturer throughout the project.

#### 1.12 EQUIPMENT SCHEDULES

- A. Fixture and equipment schedules on the drawings denoting capacities, ratings, sizes, etc., shown are the minimum acceptable and may not necessarily correspond with catalog ratings or equipment specified.

#### 1.13 WARRANTY

- A. As required in the general conditions of the contract.
- B. All workmanship, labor and materials shall be warranted for a minimum period of one (1) year from the date of final acceptance.
- C. Warranty work shall be promptly performed at Contractor's sole expense.
- D. Correction of Work: Within one year after the Substantial Completion of the work, any work found to not be in conformance with the Contract Documents will be corrected by the Contractor promptly after written notice from the owner outlining the deficiency. This requirement shall survive the acceptance of the work under this Contract and termination of the contract.

#### 1.14 ELECTRICAL DRAWINGS

- A. Electrical Drawings are diagrammatic and complementary to all other Drawings; not intended to show all features of work. Coordinate with work of other trades to avoid conflicts. Drawings and specifications are complementary, each to the other; what is shown in one is as binding as if called for in both.
- B. Install equipment to provide symmetrical appearance where not dimensioned on drawings. Do not scale drawings for equipment location. Review Contract Documents and adjust work to conform to conditions shown. Data presented on drawings are as accurate as planning can determine. Dimensional accuracy not guaranteed and field verification of dimensions,

locations, and levels to suit field conditions is directed. Provide a complete and satisfactory working access control system and video intercom system installation.

1.15 RECORD DRAWINGS

- A. Reference requirements stated in Division 1.
- B. In addition to other requirements, mark up a clean set of electrical drawings and contractor shop drawings as the work progresses, to show the location and routing of all work to include junction boxes and circuits.

1.16 CONSTRUCTION, OBSERVATION, INSPECTIONS, AND TESTS

- A. Request construction observation at least 48 hours prior to the covering of any buried or conceal work; pulling of wires and cable; installation of fixtures, or placing of covers over outlets, or panelboards.
- B. Notify state and local inspectors of work progress in accordance with applicable requirements. Submit copies of all inspection reports to Architect/Engineer.
- C. Contractor Inspections: At or near the completion and prior to final acceptance testing the Contractor shall prepare a deficiency list (punch list) of all items that are not in accordance with contract requirements, state or federal regulations, or are not complete. Submit a copy of the deficiency list to the Architect/Engineer prior to the Architect/Engineer conducting a final inspection.

1.17 POWER REQUIREMENTS AND CIRCUIT BREAKERS

- A. Provide power from the nearest available branch circuit panelboard with adequate capacity as required for all new equipment added as a part of the contract unless otherwise noted.
- B. Coordinate and provide the compatible circuit breaker, amperage, size, ratings, lugs and AIC rating for all circuit breakers added in existing panelboards.

PART 2 PRODUCTS

2.1 MATERIALS AND EQUIPMENT

- A. Materials and Equipment shall be acceptable to the authority having jurisdiction as suitable for the use intended. All electrical equipment shall bear the seal of a nationally recognized testing laboratory for the purpose for which it is installed.

PART 3 EXECUTION

3.1 WORKMANSHIP

- A. All electrical work must be installed in strict accordance with the latest adopted National Electrical Code and Municipality of Anchorage Amendments.

END OF SECTION

## BUILDING WIRE AND CABLE

### PART 1 GENERAL

#### 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

#### 1.2 SUMMARY

- A. Section includes building wire and cable and wiring connectors and connections.

#### 1.3 REFERENCES

- A. National Electrical Code (NEC).
- B. NECA (National Electrical Contractors Association) - Standard of Installation.
- C. NETA ATS (International Electrical Testing Association) - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.

#### 1.4 SYSTEM DESCRIPTION

- A. Wiring Methods - Provide the following wiring methods for all branch circuits, feeders and fire alarm circuits:
  - 1. Heated indoor locations: XHHW-2 or THHN insulation in raceway.
  - 2. Exterior, wet or other cold locations: XHHW-2 insulation in raceway.
- B. Conductors and cables for special systems not covered by this section are denoted in the associated specification section, drawing reference or as recommended by the system manufacturer whichever is greater.

## PART 2 PRODUCTS

### 2.1 THHN/THWN BUILDING WIRE

- A. Product Description: General purpose single stranded conductor.
- B. Conductor: Class B or C stranded, annealed copper per UL 83 or 1063.
- C. Insulation: Polyvinyl chloride (PVC) sheathed with nylon jacket meeting requirements of UL 83. Sizes 1/0 AWG and larger marked "For CT Use" and be sunlight resistant.
- D. Temperature: THHN 90 degrees C Dry and THWN 75 degrees C Wet.
- E. Voltage: 600 Volts.

### 2.2 XHHW-2 BUILDING WIRE

- A. Product Description: General purpose single stranded conductor.
- B. Conductor: Class B stranded, annealed copper per UL 44.
- C. Insulation: Crosslinked polyethylene (XLP) per UL 44.
- D. Temperature: 90 degrees C.
- E. Voltage: 600 Volts.

### 2.3 WIRING CONNECTORS

- A. 8 AWG and smaller
  1. Dry interior areas: Spring wire connectors, pre-insulated "twist-on" rated 105 degrees C per UL 468C. Crimp insulated fork or ring terminals for conductors terminating under screw type terminals, Thomas & Betts Sta-Kon or equal.
  2. Motor connections: Spring wire connectors, pre-insulated "twist-on" rated 105 degrees C per UL 468C. Provide a minimum of 8 wraps of Scotch 33+ electrical tape around conductors and connector to eliminate connector back off.
  3. Wet or exterior: Split bolt and PVC end cap, epoxy filled rated for direct burial per UL 486D.

## PART 3 EXECUTION

### 3.1 EXISTING WORK

- A. Remove abandoned wire and cable, including abandoned wire and cable above accessible ceiling finishes. Patch surfaces where removed cables pass through building finishes.
- B. Disconnect abandoned circuits and remove circuit wire and cable. Remove abandoned boxes when wire and cable servicing boxes is abandoned and removed. Install blank cover for abandoned boxes not removed.
- C. Provide access to existing wiring connections remaining active and requiring access. Modify installation or install access panel.

- D. Extend existing circuits using materials and methods compatible with existing electrical installations, or as specified.
- E. Clean and repair existing wire and cable remaining or where wire and cable is to be reinstalled.

### 3.2 INSTALLATION

- A. Voltage Drop: Size all branch circuit conductors to provide voltage drop of 3% or less based on the actual field routing and the load served or as denoted on the panel schedule whichever is greater. As a minimum homeruns over 75 ft are to be #10 AWG.
- B. Use conductor not smaller than #12 AWG for power circuits.
- C. Use conductors not smaller than #16 AWG for control circuits.
- D. Provide continuous raceway system for all conductors and cables unless specifically noted otherwise on the drawings or specifications.
- E. Route wire and cable to meet Project conditions.
- F. Route conductors from each system in independent raceway system and not intermixed in the same raceway, enclosure, junction box, wireway, or gutter as another system unless otherwise shown on the plans. Examples of circuits to not be intermixed are 480Y/277 with 208Y/120 Volt circuits, emergency power, line voltage circuits with low voltage wiring, power limited, telecommunication, direct current, etc.
- G. Do not install XHHW-2 conductors when ambient temperatures are below -5 degrees C and THHN/THWN conductors when ambient temperatures are below 0 degrees C.
- H. Provide stranded wire for all fire alarm devices, security devices, connections to motors, transformers and equipment that vibrates or requires flexibility.
- I. Do not terminate more than one conductor per individual branch circuit breakers.
- J. Install wire and cable in accordance with NECA "Standard of Installation."
- K. Neatly train and lace wiring inside boxes, equipment, and panelboards supported with cable ties.
- L. Provide cable supports as recommended by the NEC or cable manufacturer in vertical conduits.
- M. Color code wire and cable and identify each conductor with its circuit number or other designation indicated under provisions of Section 26 05 53.
- N. Special Techniques - Wiring Connections:
  - 1. Perform wiring connections and splices only in accessible outlet or junction boxes.
  - 2. Do not splice feeder conductors unless otherwise noted on the drawings.
  - 3. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise.
  - 4. Clean conductor surfaces before installing lugs and connectors.
  - 5. Strip conductor insulation to the exposed length as recommended by the manufacturer for the connector used.

6. Tape un-insulated conductors and connectors with electrical tape to 150 percent of insulation rating of conductor.
7. Install insulated spring wire connectors with plastic caps or compression when not available for copper conductor splices and taps, 8 AWG and smaller.
8. Where stranded conductors are terminated on screw type terminals install crimp on fork terminals. Do not place bare stranded conductors directly under screws.

### 3.3 WIRE COLOR

#### A. General

1. For wire sizes 10 AWG and smaller, install wire colors in accordance with the following:
  - a. Black and red for single phase circuits at 120/240 volts.
  - b. Black, red, and blue for circuits at 120/208 volts single or three phase.
  - c. Brown, orange and yellow for circuits at 277/480 volts single or three phase.
2. For wire sizes 8 AWG and larger, identify wire with colored tape at terminals, splices and boxes. Colors are as follows:
  - a. Black and red for single phase circuits at 120/240 volts.
  - b. Black, red, and blue for circuits at 120/208 volts single or three phase.
  - c. Brown, orange and yellow for circuits at 277/480 volts single or three phase.

- B. Neutral Conductors: White. When two or more neutrals are located in one conduit, individually identify each with proper circuit number.

#### C. Ground Conductors:

1. For 8 AWG and smaller: Green.
2. For 6 AWG and larger: Identify with green tape at both ends and visible points including junction boxes.

END OF SECTION

## GROUNDING AND BONDING

### PART 1 GENERAL

#### 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

#### 1.2 SUMMARY

- A. Section includes:
  - 1. Wire.
  - 2. Mechanical connectors.

#### 1.3 REFERENCES

- A. NETA ATS (International Electrical Testing Association) - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- B. NFPA 70 (National Fire Protection Association) - National Electrical Code.

#### 1.4 SYSTEM DESCRIPTION

- A. Existing grounding system; no changes to the system required.

#### 1.5 SUBMITTALS

- A. Per Division 01 and Section 26 05 00 - BASIC ELECTRICAL REQUIREMENTS.
- B. Product Data: Submit data on grounding conductors and connections to be use.

## PART 2 PRODUCTS

### 2.1 GROUND AND BONDING CONDUCTOR

- A. Material: Bare or insulated stranded copper. Use only insulated copper conductor for telecommunication grounding conductors.
- B. Equipment Grounding Conductor: Copper conductor bare or insulated.

### 2.2 MECHANICAL CONNECTORS

- A. General Use: Non-reversible crimp type lugs only. Use factory made compression lug for all terminations.

## PART 3 EXECUTION

### 3.1 PREPARATION

- A. Remove paint and surface contaminants at connection points.

### 3.2 EXISTING WORK

- A. Modify existing grounding system to maintain continuity to accommodate renovations.

### 3.3 GENERAL INSTALLATION

- A. Install grounding and bonding conductors concealed from view except in mechanical and electrical rooms.
- B. Provide raceway for each grounding or bonding conductor. Bond the raceway and conductor together at each ferrous conduit termination with grounding bushings.
- C. Clean each mechanical connection and coat with antioxidant prior to connection.
- D. Equipment Grounding Conductor: Install separate, insulated conductor within each feeder and branch circuit raceway. Terminate each end on suitable lug, bus, or bushing. Provide bond to every electrical box and enclosure.
- E. Provide bonding for each metallic raceway and wireway system to provide continuous electrical continuity. Provide bond to every box and enclosure.
- F. Permanently ground entire light and power system in accordance with NEC, including service equipment, distribution panels, lighting panelboards, switch and starter enclosures, motor frames, grounding type receptacles, and other exposed non-current carrying metal parts of electrical equipment.
- G. Accomplish grounding of electrical system by using insulated grounding conductor installed with feeders and branch circuit conductors in conduits. Size grounding conductors in accordance with NEC. Install from grounding bus of serving panel to ground bus of served panel, grounding screw of receptacles, lighting fixture housing, threaded screw in light switch and outlet boxes or metal enclosures of service equipment.

GROUNDING AND BONDING

Division 26

Section 26 05 26

- H. Grounding electrical system using continuous metal raceway system enclosing circuit conductors in accordance with NEC.
- I. Permanently attach equipment and grounding conductors prior to energizing equipment.

END OF SECTION



## ELECTRICAL HANGERS AND SUPPORTS

## PART 1 GENERAL

## 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

## 1.2 SUMMARY

- A. Section Includes:
  - 1. Conduit supports.
  - 2. Formed steel channel.
  - 3. Spring steel clips.
  - 4. Equipment bases and supports.
  - 5. Seismic Restraints.

## 1.3 REFERENCES

- A. NFPA 70 (National Fire Protection Association) - National Electrical Code.
- B. 2009 IBC (International Building Code).

## 1.4 SUBMITTALS

- A. Division 1 and Section 26 05 00 - Electrical General Provisions.
- B. Submit manufacturers Product Data:
  - 1. Hangers and Supports.
  - 2. Conduit Straps.
  - 3. Anchors.
  - 4. Seismic Shop Drawings.

- C. Manufacturer's Installation Instructions:
  - 1. Hangers and Supports: Submit special procedures and assembly of components.

## 1.5 DESIGN REQUIREMENTS

- A. Seismic Calculations:
  - 1. Provide shop drawing and calculations for anchorage of electrical equipment and raceway systems. Shop drawings to include anchor bolt description, layout, sizes of materials, specifications and building structure to be used for attachment. Provide shop drawings and calculations sealed by registered structural engineer in the State of Alaska.
  - 2. Seismic support design to resist earthquake forces in accordance with American Society of Civil Engineers standard ACSE/SEI 7-10 as referenced in the 2009 IBC.
  - 3. Total lateral force to be taken as 1.0 times the equipment weight acting in any direction through the equipment center of gravity.
  - 4. Where flexible connections are used between the distribution system and equipment, Shop Drawings and Calculations are not required for:
    - a. Floor mounted equipment weighing 400 pounds or less and mounted no more than 4 feet above floor level.
    - b. Equipment weighing 20 pounds or less.
    - c. Distribution systems weighing less than 5 pounds per foot.

## PART 2 PRODUCTS

### 2.1 CONDUIT SUPPORTS

- A. Hanger Rods: Threaded high tensile strength galvanized carbon steel with free running threads.
- B. Beam Clamps: Malleable Iron, with tapered hole in base and back to accept either bolt or hanger rod. Set screw: hardened steel.
- C. Conduit clamps for trapeze hangers: Galvanized steel, notched to fit trapeze with single bolt to tighten.
- D. Conduit clamps - general purpose: One hole galvanized stamped steel or malleable iron for surface mounted conduits.

### 2.2 FORMED STEEL CHANNEL AND ACCESSORIES

- A. Product Description: U-channel strut Exterior and Wet Areas – Hot dipped galvanized 12 gage thick steel. Dry Indoor Areas – Zinc or Cadmium Plated 12 gage thick steel.
- B. Accessories: Modular to match channel finish and configuration by the same manufacturer.

### 2.3 SPRING STEEL CLIPS

- A. Product Description: "Caddy" spring steel electrical support systems for each type required (Provide only where concealed in walls or above ceilings).

## 2.4 MANUFACTURED SEISMIC RESTRAINT SYSTEMS

- A. Product Description: Provide pre-approved manufactured seismic restraint systems for all seismic support. Systems to be Superstrut seismic restraint system pre-approval No. R-0003, Kinline pre-approval No. R-0071, or B-Line pre-approval No. R-0114.

## 2.5 SEISMIC SUPPORT WIRE AND CABLE

- A. Product Description: #12 gage ceiling support wire where concealed. Aircraft stainless steel cable where exposed.

## 2.6 CABLE TIES

- A. Product Description: High strength nylon temperature rated to 185 degrees F. Self locking. Provide plenum rated cable ties where located above ceilings.

# PART 3 EXECUTION

## 3.1 INSTALLATION - HANGERS AND SUPPORTS

- A. Anchors and Fasteners:
1. Concrete Structural Elements: Provide expansion anchors and powder actuated anchors.
  2. Steel Structural Elements: Provide beam clamps. Provide spring steel clips where concealed.
  3. Concrete Surfaces: Provide expansion anchors.
  4. Plaster and Gypsum Board Partitions: Provide sheet metal backing installed behind wallboard.
  5. Hollow Masonry: Provide toggle bolts.
  6. Solid Masonry Walls: Provide expansion anchors.
  7. Sheet Metal: Provide sheet metal screws.
  8. Wood Elements: Provide wood screws.
- B. Supports:
1. Fabricate supports from structural steel or formed steel channel. Install hexagon head bolts to present neat appearance with adequate strength and rigidity.
  2. Install spring lock washers under nuts. Double nut all trapeze hanger supports.
  3. Install surface mounted cabinets and panelboards with minimum of four anchors.
  4. In wet and damp locations install steel channel supports to stand cabinets and panelboards 1 inch off wall.
  5. Provide conduit back spacers in all wet or wash down areas.
  6. No conduit hangars allowed from floor level up to 10 feet above finished floor level. Only use heavy duty, one hole conduit straps below 10' aff.
- C. Seismic Bracing:
1. Support and brace all electrical equipment and associated raceways per UBC Zone 4 requirements.
  2. Provide manufactured seismic restraint systems.
  3. Bracing is not required for individual raceways less than 2.5" inside diameter and conduits hung on hangers so that the top of the conduit is 12 inches or less from the bottom of the support hanger.

- D. Support vertical conduit at every floor.
- E. Install raceway supports in accordance with NEC and do not exceed 10 feet.
- F. Do not support raceways, low voltage pathways, cables, telecommunication pathways or boxes from ceiling suspension wires or suspended ceiling systems. Provide support from building structure independently to allow ceiling removal and replacement without removal of electrical system. If dedicated support wires are used, wires and wire clips must be painted or color-coded. Exception: Outlet boxes for ceiling mounted light fixtures, speakers and smoke detectors may be mounted in the ceiling system.
- G. Bridge studs top and bottom with channels to support flush-mounted cabinets and panelboards in stud walls.
- H. Do not fasten supports to pipes, ducts, mechanical equipment, or conduit.
- I. Install multiple conduit runs on common hangers.
- J. Do not drill or cut structural members except where specifically approved.
- K. Replace or repair any fireproofing damaged by the installation of supporting equipment or devices.
- L. Do not penetrate by drilling or screwing into metal roof decking. All penetrations into metal roof decking must be approved by the Project Manager in writing.

### 3.2 INSTALLATION - EQUIPMENT BASES AND SUPPORTS

- A. Using templates furnished with equipment, install anchor bolts, and accessories for mounting and anchoring of all equipment per manufacturers recommendations and at the four corner points at minimum.
- B. Construct supports of formed steel channel for seismic bracing. Brace and fasten with flanges bolted to structure.

END OF SECTION

## RACEWAY AND BOXES

## PART 1 GENERAL

## 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

## 1.2 SUMMARY

- A. Section includes:
1. Metal conduit.
  2. Flexible metal conduit.
  3. Liquidtight metal conduit.
  4. Electrical metallic tubing.
  5. Surface mounted raceway (SMR).
  6. Fittings and conduit bodies.
  7. Pull and junction boxes.

## 1.3 REFERENCES

- A. American National Standards Institute (ANSI):
1. ANSI C80.1 - Rigid Steel Conduit, Zinc Coated.
  2. ANSI C80.3 - Electrical Metallic Tubing, Zinc Coated.
  3. ANSI C80.5 - Rigid Aluminum Conduit.
- B. American Society for Testing and Materials (ASTM):
1. ASTM A 123 – Specification for Zinc Coatings on Products Fabricated from Rolled, Pressed, and Forged Steel Shapes, Plates, Bars and Strip.
- C. National Electrical Manufacturers Association (NEMA):
1. NEMA FB 1 (National Electrical Manufacturers Association) - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies.

2. NEMA OS 1 (National Electrical Manufacturers Association) - Sheet-steel Outlet Boxes, Device Boxes, Covers, and Box Supports.
  3. NEMA OS 2 (National Electrical Manufacturers Association) - Nonmetallic Outlet Boxes, Device Boxes, Covers and Box Supports.
  4. NEMA RN 1 (National Electrical Manufacturers Association) - Polyvinyl Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit.
  5. NEMA TC 2 (National Electrical Manufacturers Association) - Electrical Plastic Tubing (EPT) and Conduit (EPC-40 and EPC-80).
  6. NEMA TC 3 (National Electrical Manufacturers Association) - PVC Fittings for Use with Rigid PVC Conduit and Tubing.
  7. NEMA 250 (National Electrical Manufacturers Association) - Enclosures for Electrical Equipment (1000 Volts Maximum).
- D. National Fire Protection Association (NFPA):
1. NFPA 70 - National Electrical Code.
- E. International Building Code (IBC):
1. IBC Seismic Category C requirements.

#### 1.4 SYSTEM DESCRIPTION

- A. Provide raceway and boxes located as indicated on Drawings, and at other locations required for splices, taps, wire pulling, equipment connections, and compliance with regulatory requirements. Raceway and boxes are shown in approximate locations unless dimensioned. Provide raceway to complete wiring system.
- B. Raceway Minimum Size:
1. Below Grade: Provide 1 inch minimum.
  2. Above Grade or Slab on Grade: Provide  $\frac{3}{4}$  inch minimum. Raceway may be reduced to  $\frac{1}{2}$  inch for final connection of raceway up to 6 feet for connection to fixture or device where maximum conduit entry size is  $\frac{1}{2}$  inch.
- C. Outdoor Above Grade, Damp or Wet Locations:
1. Raceway: Provide rigid steel.
  2. Boxes and Enclosures: Provide weatherproof malleable iron for branch circuit junction and outlet boxes.
  3. Fittings: Provide galvanized malleable iron with gaskets. Provide Myers threaded hubs for all conduit entries into top and side of sheet metal enclosures. Provide gland raintight fittings for electrical metallic tubing.
- D. Concealed Dry Locations:
1. Raceway: Provide electrical metallic tubing unless otherwise noted. Flexible metal conduit shall be allowed where finished in walls or ceiling spaces that are not accessible otherwise.
  2. Boxes and Enclosures: Provide sheet-metal boxes.
  3. Fittings: Provide cast and steel.
- E. Exposed Dry Locations:
1. Raceway: Mechanical and electrical spaces: Provide electrical metallic tubing. Exposed in non-mechanical spaces: Provide surface mounted raceway (SMR).
  2. Boxes and Enclosures: Provide white factory manufactured boxes by same supplier as the fire alarm devices.
  3. Fittings: Provide cast alloy.

- F. Hazardous Locations (Classified Wiring):
  - 1. Raceway: Provide rigid steel conduit.
  - 2. Boxes and Enclosures: Provide galvanized malleable iron rated Class 1 Division 1, NEMA FB1.
- G. Equipment Connections: Connections to components in suspended ceilings, vibrating equipment or equipment that requires removal for maintenance or replacement: Flexible metal conduit in dry locations and liquidtight flexible metal conduit in damp or wet locations. Maximum 6 feet in length.

## 1.5 DESIGN REQUIREMENTS

- A. Conduit Minimum Raceway Size: Size all raceways not shown on the drawings to not exceed the percentage fill specified in the NEC Table 1, Chapter 9 using the conduit dimensions of the NEC Table 4, Chapter 9 and conductor properties of the NEC Table 5, Chapter 9. Where specific cable is not listed use major diameter provided by the manufacturer.
- B. Box Minimum Size: Provide all boxes sized and configured per NEC Article 314.
- C. IBC Seismic Design: Provide support to per Seismic Category C requirements.

## 1.6 SUBMITTALS

- A. Division 1 and Section 26 05 00 - Electrical General Provisions.
- B. Product Data: Submit data for products to be provided.
- C. Manufacturer's Installation Instructions: Submit application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of Product.

## 1.7 DELIVERY, STORAGE, AND HANDLING

- A. Protect conduit from corrosion and entrance of debris by storing above grade. Provide appropriate covering.

## 1.8 COORDINATION

- A. Coordinate mounting heights, orientation and locations of outlets mounted above counters, benches, and backsplashes.
- B. Coordinate layout and installation of raceways and boxes to provide adequate headroom, working clearance and access.

## PART 2 PRODUCTS

### 2.1 METAL CONDUIT

- A. Rigid Steel Conduit: ANSI C80.1, UL 6.
- B. Rigid Aluminum Conduit: ANSI C80.5.

- C. Fittings and Conduit Bodies: NEMA FB 1, UL 514B; Galvanized malleable iron with threaded hubs for all conduit entries. Provide threaded connections and couplings only. Set Screw and running thread fittings are not permitted. Provide copper free aluminum fittings and conduit bodies with Aluminum Conduit.
- D. Provide bushings at all conduit terminations.

## 2.2 FLEXIBLE METAL CONDUIT

- A. Product Description: UL 1, galvanized or zinc coated flexible steel construction.
- B. Fittings: NEMA FB 1. Galvanized malleable iron or steel with insulated throats.

## 2.3 LIQUIDTIGHT FLEXIBLE METAL CONDUIT

- A. Product Description: UL 360, Interlocked steel construction with PVC jacket.
- B. Fittings: NEMA FB 1. Galvanized malleable iron or steel liquidtight.

## 2.4 ELECTRICAL METALLIC TUBING (EMT)

- A. Product Description: ANSI C80.3, UL 797; galvanized steel tubing.
- B. Fittings and Conduit Bodies: NEMA FB 1; galvanized steel or malleable iron, compression or set screw type. Die cast or pressure cast fittings and locknuts are not permitted.

## 2.5 SURFACE MOUNTED RACEWAY

- A. Product Description: One piece 1.0 mm low profile steel surface raceway. Ivory finish. Wiremold V700 or approved equal.
- B. Fittings: All bushings, mounting straps, connection covers, elbows, connectors, and boxes to be Wiremold V700 Series or approved equal. Appliance boxes for pull stations, indicating appliances, and door holder boxes to be factory boxes specified.
  - 1. Provide 5307 SMR back mounting clips only. 1-hole straps are not allowed for SMR supports.

## 2.6 DEVICE AND APPLIANCE BOXES

- A. Concealed: Sheet Metal Outlet Boxes: NEMA OS 1, UL514A galvanized steel with plaster ring where applicable.
  - 1. Minimum size 4 inches wide x 4 inches wide x 2-1/8 inch deep.
- B. Surface Box: White factory manufactured fire alarm appliance box for surface mounting of fire alarm devices. 4" square K.O. boxes, Wiremold, cast aluminum or field painted junction boxes not provided from the fire alarm equipment supplier are not acceptable.
  - 1. Interior Locations: Sheet steel factory white sized for installed device.
  - 2. Exterior Locations: Weatherproof Cast box sized for Installed device.
- C. Door Holder: Provide stainless steel cast steel back box from the door holder manufacturer for surface applications.

2.7 PULL AND JUNCTION BOXES

- A. Sheet Metal Boxes: NEMA OS 1, galvanized steel.
- B. Surface Mounted Cast Metal Box: NEMA 250, Type 4; flat-flanged, surface mounted junction box:
  - 1. Material: Galvanized cast iron.
  - 2. Cover: Furnish with ground flange, neoprene gasket, and stainless steel cover screws.
- C. Fiberglass Concrete composite Type 1A Handholes: Die-molded, glass-fiber concrete composite hand holes:
  - 1. Cover: Glass-fiber concrete composite, weatherproof cover with nonskid finish.
  - 2. Cover Legend: "FIRE ALARM".

2.8 EXPANSION FITTINGS:

- A. Galvanized malleable iron, galvanized with grounding bond jumper.

2.9 RACEWAY SEALING FITTINGS:

- A. Galvanized malleable iron, galvanized filled with sealing compound.
  - 1. Class 1 Division 1 boundary lines and isolation of arcing devices use Class 1 Division 1 sealing compound.

2.10 BUSHINGS:

- A. Non-grounding: Threaded impact resistant plastic.

2.11 LOCKNUTS:

- A. Threaded Electro Zinc Plated Steel designed to cut through protective coatings for ground continuity.

2.12 WIREWAY:

- A. Product Description: General purpose type wireway. Size per NEC minimum fill capacity required.
- B. Knockouts: Field install, no factory knockouts acceptable.
- C. Cover: Screw cover.
- D. Fittings and Accessories: Include factory couplings, offsets, elbows, adapters and support straps required for a complete system. Provide internal ground bonding jumper bonded to each section.

2.13 FIRE STOP:

- A. Asbestos-free intumescent fire stopping material capable of expanding up to 10 times when exposed to temperatures 250 degrees F or higher. Material to be rated for fire, smoke and gas stopping in accordance with ASTM E814 and UL 1479.

## PART 3 EXECUTION

### 3.1 EXISTING WORK

- A. Remove exposed abandoned boxes, raceway. Cut raceway flush with walls and floors, and patch surfaces.
- B. Disconnect abandoned outlets and remove devices. Remove abandoned outlets when raceway is abandoned and removed. Install blank cover for abandoned outlets not removed.
- C. Maintain access to existing boxes and other installations remaining active and requiring access. Modify installation or provide access panel.
- D. Extend existing raceway and box installations using materials and methods compatible with existing electrical installations, or as specified.
- E. Clean and repair existing raceway and boxes to remain or to be reinstalled.
- F. Upgrade all raceways and junction boxes that are reused to conform to current code requirements.

### 3.2 INSTALLATION

- A. Ground and bond raceway and boxes in accordance with Section 26 05 26.
- B. Fasten raceway and box supports to structure and finishes in accordance with Section 26 05 29.
- C. Identify raceway and boxes with origin and destination in accordance with Section 26 05 53.

### 3.3 RACEWAY INSTALLATION

- A. Provide raceways concealed in construction unless specifically noted otherwise. Do not route conduits on roofs, outside of exterior walls, or surface of interior finished walls unless specifically noted to do so on the plans.
- B. Raceway routing and boxes are shown in approximate locations unless dimensioned. Where raceway routing is not denoted field route to provide complete wiring system.
- C. The drawings do not necessarily show every pull or junction box required. Provide boxes as shown or as necessary to facilitate bend limitations and conductor pulling.
- D. Do not route raceways on floor. Arrange raceway and boxes to maintain a minimum of 6 feet 6 inches of headroom. Install raceways level and square to a tolerance of 1/8" per 10 feet. Route raceways parallel and perpendicular to walls and ceilings for all exposed and concealed areas.
- E. Provide bushing at each raceway termination not installed within an enclosure threaded to the raceway end or connector.
- F. Provide independent raceway system for the entire fire alarm installation.

- G. Provide permanent accessibility to all junction boxes, pull boxes and conduit access fittings.
- H. Arrange raceway supports to prevent misalignment during wiring installation.
- I. Group related raceway; support using conduit rack. Construct rack using steel channel specified in Section 26 05 29; provide space on each for 25 percent additional raceways.
- J. Do not support raceway with wire or perforated pipe straps. Remove wire used for temporary supports
- K. Do not attach raceway to ceiling support wires or other piping systems.
- L. Construct wireway supports from steel channel specified in Section 26 05 29.
- M. Maintain clearance between raceway and piping for maintenance purposes.
- N. Maintain 12 inch clearance between raceway and surfaces with temperatures exceeding 104 degrees F.
- O. Cut conduit square using saw or pipe cutter; de-burr all conduit ends to smooth finish prior to installation.
- P. Bring conduit to shoulder of fittings; fasten securely. Where locknuts are used install with one inside box and one outside with dished part against box.
- Q. Coat non-ferrous conduit threads prior to joining with conductive metallic grease antioxidant.
- R. Install conduit threaded raintight hubs to fasten conduit to sheet metal boxes for all exterior or interior damp or wet locations. Sealing locknuts are not acceptable.
- S. Install no more than equivalent of three 90 degree bends between boxes. Install conduit bodies to make sharp changes in direction, as around beams and corners.
- T. Avoid moisture traps; install junction box with drain fitting at low points in conduit system.
- U. Install fittings and flexible metal conduit to accommodate 3 axis movement where raceway crosses seismic joints.
- V. Install fittings to accommodate expansion and contraction where raceway crosses control and expansion joints.
- W. Install suitable pull string or cord in each empty raceway except sleeves and nipples.
- X. Install suitable caps to protect installed conduit against entrance of dirt and moisture.
- Y. Close ends and unused openings in wireway and surface raceway.
- Z. Do not intermix conductors from separate panelboards or any other system in the same raceway system or junction boxes unless specifically denoted otherwise.

- AA. Provide box barrier for separation of boxes which contain multiple devices and wiring over 150 Volts to ground and more than 300 Volts between conductors into compartments and where normal and emergency power in the same junction box.
- BB. Where conduit penetrates fire-rated walls and floors, provide mechanical fire-stop fittings with UL listed fire rating equal to wall or floor rating, seal opening around conduit with UL listed firestop sealant or intumescent firestop, preserving the fire time rating of the construction.
- CC. Use non-hardening duct seal to satisfy requirement of Article 300-7, NEC for different temperature portions of raceways, including those passing from interior to exterior portions of structure.
- DD. Provide blank covers or plates for all boxes that do not contain devices.
- EE. Provide weatherhead on all raceway stub ups which are outdoors and do not terminate in to equipment.
- FF. Paint all exposed conduits and junction boxes to match existing décor.
- GG. Do not screw to the roof decking without prior specific written approval.

#### 3.4 BOX INSTALLATION

- A. Install wall mounted boxes at elevations to accommodate mounting heights as indicated on Drawings.
- B. Adjust box location up to 6 feet prior to rough-in to accommodate intended purpose.
- C. Install pull boxes and junction boxes above accessible ceilings and in unfinished areas only.
- D. Inaccessible Ceiling Areas: Install outlet and junction boxes no more than 6 inches from ceiling access panel.
- E. Do not install flush mounting box back-to-back in walls; install with minimum 6 inches separation.
- F. Install with minimum 24 inches separation in fire rated walls. Limit penetrations in fire rated walls to 16 square inches each and a maximum total combined penetration area of 100 square inches in any given 100 square feet of wall. Where penetrations are in excess of these requirements provided UL listed fire stop wrap acceptable to Authority having Jurisdiction.
- G. Secure flush mounting box to interior wall and partition studs. Accurately position to allow for surface finish thickness.
- H. Install flush mounting box without damaging wall insulation or reducing its effectiveness.
- I. Install adjustable steel channel fasteners for box support in existing walls.
- J. Do not fasten boxes to ceiling support wires or other piping systems.
- K. Support boxes independently of conduit.

3.5 CLEANING

- A. Clean interior of boxes to remove dust, debris, and other material and clean exposed surfaces and restore finish.

END OF SECTION



## ELECTRICAL IDENTIFICATION

## PART 1 GENERAL

## 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

## 1.2 SUMMARY

- A. Section includes:
1. Nameplates.
  2. Labels.
  3. Wire markers.
  4. Conduit markers.

## 1.3 ENVIRONMENTAL REQUIREMENTS

- A. Install labels and nameplates only when ambient temperature and humidity conditions for adhesive are within range recommended by manufacturer.

## 1.4 SUBMITTALS

- A. Division 1 and Section 26 05 00 – Electrical General Provisions.
- B. Product Data:
1. Submit manufacturer's catalog literature for each product required.
  2. Submit electrical identification schedule including list of wording, symbols, letter size, color coding, tag number, location, and function.
- C. Manufacturer's Installation Instructions: Indicate installation instructions, special procedures, and installation.

## PART 2 PRODUCTS

### 2.1 NAMEPLATES

- A. Product Description: Laminated three-layer plastic with engraved white letters on red background. Attach to equipment using threaded screws or pop-rivets.
- B. Letter Size:
  - 1. 1/4 inch high letters for identifying individual panel or equipment.
  - 2. 1/8 inch high letters for remaining lines with 1/8 inch spacing between lines.
- C. Minimum nameplate size: 1/8 inch thick with a consistent length and height for each type of nameplate wherever installed on the project.

### 2.2 WIRE MARKERS

- A. Power and Lighting Description: Cloth tape type wire markers for all neutrals and Phase conductors.
- B. Low Voltage System Description: Machine printed label with unique wire number that is shown on the fire alarm shop drawing.

### 2.3 LABELS

- A. Product Description: Thermal Transfer, 180 DPI self adhesive tape printer. Clear tape with black letters, approximately 3/16" high characters.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Install identifying devices after completion of painting.
- B. Nameplate Installation:
  - 1. Install nameplate parallel to equipment lines.
  - 2. Secure nameplate with two brass machine screws tapped and threaded to panelboard. Machine screws to not protrude more than 1/16 inch on back side.
  - 3. Secure nameplate to inside surface of door on recessed panelboard in finished locations.
  - 4. Security System Panels:
    - a. Provide nameplate for each control panel with the following information:
      - 1) Line 1: Unique panel name as shown on the shop drawings.
      - 2) Line 2: Identify power circuit number feeding panel if applicable.
- C. Wire Marker Installation:
  - 1. Power Circuits: Provide panelboard and circuit number at each pull box, junction box, and termination.
  - 2. Security System Circuits: Wire number as indicated on schematic and shop drawings at each pull box, junction box, and termination.
  - 3. Color Code: Color code conductors in accordance with 26 05 19 Building Wire and Cable.

- D. Batteries:
  - 1. Label all batteries feeding security alarm devices with install date. Label shall be machine printed label.
- E. Provide label on telephone conductors at each end denoting FACP lines.
- F. Provide label on exterior surface of each new initiating device, relay module and input relay module, zone extension module, denoting the unique device address corresponding to the text annunciator description.

END OF SECTION



## INSPECTION AND TESTING

### PART 1 GENERAL

#### 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

#### 1.2 SUMMARY

- A. Section includes:
  - 1. Receptacle Branch Circuit Testing.
  - 2. Telecommunication Unshielded Twisted Pair Testing.

#### 1.3 REFERENCES

- A. NFPA 72
- B. NETA ATS – Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.
- C. ANSI/IEEE Std 81-1983 Guide for Measuring Earth Resistivity, Ground Impedance, and Earth Surface Potentials of a Ground System.
- D. ANSI/TIA/EIA – 568-B.1 and Addendums, General Cabling System Requirements
- E. ANSI/TIA/EIA – 568-B.2 and Addendums, Balanced Twisted-Pair Cabling Components
- F. ANSI/TIA/EIA – 568-B.3 and Addendums, Optical Fiber Cabling Components Standard
- G. ANSI/TIA/EIA – 526-14 Method B Optical Power Loss Measurements of Installed Multimode Fiber Cable Plant.

#### 1.4 SUBMITTALS

- A. Section 01300 - Submittal Procedures: Requirements for submittals and Section 26 05 00.
- B. Product Data: Submit technical information for each test instrument to include manufacturer, model number, serial number, ratings, accuracy, and National Institute of Standards and Technology (NIST) Traceable calibration certification.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Submit Test Reports per Section 26 60 00.

#### 1.6 COORDINATION

- A. Provide written 72 hours advance notice of all tests to be performed to allow ASD representative to witness.

#### 1.7 REQUIRED TESTING INSTRUMENTS

- A. Branch circuit analyzer/receptacle tester.
  - 1. Product Description: Branch circuit analyzer capable of receptacle testing of voltage drop under load, hot-neutral-ground conductor resistances, common mode (N-G) Voltage, and G.F.C.I. trip point.
  - 2. Manufacturer: Ideal Sure Test. Model: ST-1D Branch Circuit Analyzer.
- B. Telecommunication unshielded twisted pair test meter.
  - 1. Product Description: Hand-Held Level III Telecommunication Cable Analyzer, capable of testing cables to Cat 5E or Cat 6 standards. The maximum frequency of the tester shall be set at 250-350 MHZ. Prior to test, upgrade the unit with latest software revision. The analyzer shall have the appropriate interface adapter which meets specified accuracy requirements.
  - 2. Manufacturer:
    - a. Agilent WireScope Model: 350.
    - b. Fluke Model: DSP 4100.
  - 3. Equipment Accuracy: Per TIA/EIA 568 B.1.

#### 1.8 TEST INSTRUMENT CALIBRATION

- A. All test equipment shall be in good mechanical and electrical condition.
- B. Provide calibration for each test instrument directly traceable to the National Institute of Standards and Technology (NIST) of higher accuracy than that of the instrument tested.
- C. Provide calibration labels visible on all test equipment. Records, which show date and results of instruments calibrated or tested, shall be kept up-to-date.
- D. Calibrate instruments in accordance with the following frequency schedule:
  - 1. Field instruments: 12 months maximum.
  - 2. Up-to-date instrument calibration instructions and procedures shall be maintained for each test instrument with the equipment. Provide calibration for the telecommunication UTP Level III test instrument directly traceable to the National Institute of Standards and Technology (NIST) of higher accuracy than that of the instrument tested.

## 1.9 MINIMUM REPORT INFORMATION

- A. Report Criteria: After each test, promptly submit one copy of report to ASD. Include information on the ASD report form where included within this specification otherwise provide form with the minimum following information:
  - 1. Date issued.
  - 2. ASD Project title and number.
  - 3. Name and Model of Tester and witnesses.
  - 4. Date and time of sampling or inspection.
  - 5. Identification of product and specifications section.
  - 6. Type of inspection or test.
  - 7. Date of test.
  - 8. Results of tests.
  - 9. Indicate compliance or non-compliance with Contract Documents.
  - 10. Final adjustment setting values where applicable.
- B. Submit copy of all tests performed in the O&M manual.
- C. Submit copy of all tests performed in the O&M Manual, include CDROM electronic copy of all telecommunication test full spectrum plots.

## 1.10 GENERAL REQUIREMENTS

- A. Request for Tests: Notify Owner Representative and Project Manager a minimum of 72 hours in advance of all tests.
- B. Submit test results within 3 working days of each test and included in the O&M manual. Submit all test data in hard copy and electronic format on CD-ROM.
- C. Provide qualified personnel at site to perform all testing.
- D. Perform specified testing of products in accordance with specified standards or as denoted in this specification whichever is more stringent.
- E. Promptly notify ASD of irregularities or non-conformance of Work or products.
- F. Perform additional tests when test is performed incorrectly, deemed inaccurate, or incorrectly documented.
- G. The Contractor shall provide all forms, instrumentation and test equipment, loads, and other consumables required to demonstrate the systems to ASD's satisfaction.
- H. Perform and submit all testing prior to substantial completion and system acceptance.
- I. Retest all material, cables etc that are disturbed after testing.
- J. Replace and retest all material installed which does not meet or exceed the minimum acceptable limits set forth in this specification in accordance with the contract original requirements at no additional charge to Contract Sum/Price.
- K. ASD Project Manager shall be notified in writing at least 3 days prior to any testing being performed.

## PART 2 PRODUCTS

Not used.

## PART 3 EXECUTION

## 3.1 BRANCH CIRCUIT AND RECEPTACLE TEST

- A. Test Criteria:
1. Use Branch Circuit Analyzer to perform the tests.
  2. Test minimum: each installed receptacle.
- B. Test Criteria:
1. Open Hot.
  2. Open Neutral.
  3. Open Ground.
  4. Hot and Neutral reversed.
  5. Neutral and Ground reversed.
  6. Hot and Ground reversed.
  7. Ground resistance. (verify ground integrity).
  8. Excessive voltage drop; indicating a poor connection, under sized conductor. Repair or replace as required.

## 3.2 TELECOMMUNICATION UNSHIELDED TWISTED PAIR TEST

- A. Incoming Inspection Test Criteria:
1. Inspect all materials for damage.
  2. Record all cable reel serial numbers received or rejected. Submit serial numbers to Project Manager.
- B. Final Inspection Test Criteria:
1. Base Bid: Test cabling links to TIA/EIA-568-B.1 Section 11.2: 100-Ohm twisted pair transmission performance and field test requirements. "Category 5e".
  2. Additive Alternate: Test cabling links to TIA/EIA-568-B.2-1, Addendum 1 for 4-pair 100 ohm Category 6.
  3. Perform test on every horizontal cable from patch panel to station outlet or other cables installed.
  4. Cabling links shall be tested against the "Permanent Link" performance limits.
  5. Configure test instrument for TIA 568-B.1, NVP and cable criteria to match manufacturer's data for tested cable.
  6. Provide detailed test results and full spectrum plot data saved in native electronic instrument format to at least 250 MHz on CD-ROM for future analysis of test results with the printed test report.
  7. Include in printed test report:
    - a. Summary indicating
      - 1) Overall Totals for pass, fail, length
      - 2) Cable label, result, target, network, length, margin, type, date/time
    - b. Cable certification reports PowerSum data with plots
  8. Test, analyze, and record the following criteria for each cable and pairs:
    - a. Cable Identification Number to match final record drawings.
    - b. Wiremap.
    - c. Length.
    - d. Propagation Delay.
    - e. Delay Skew.

- f. NEXT.
  - g. Return Loss.
  - h. Attenuation / Insertion Loss
  - i. ACR.
  - j. ELFEXT.
  - k. Power Sum NEXT.
  - l. Power Sum ACR.
  - m. Power Sum ELFEXT.
  - n. Propagation Delay and Delay Skew Specification for 100 ohm 4-pair cable.
  - o. Ambient Noise.
9. The test instrument options shall be set as follows:
- a. Pairing Convention - 568B
  - b. Margin Checking Indication - On  
(very close to the limit cables marked with \*)
  - c. Resistance - On
  - d. Attenuation Warning - On (measured attenuation is excessive relative to cable length)
  - e. Complete ELFEXT Mode - On (4 plots for each of the 6 pair combinations, 24 plots total)
  - f. Frequency Step Mode - Certification Mode
  - g. Save Mode - Full Data Set
  - h. Max Frequency – 250 or 350 MHz
  - i. 3-dB Rule may be applied for short cabling or in the low frequency range
10. Test, analyze, and record for compliance with signal to noise ratio (SNR) for a minimum of the following LAN technologies
- a. 10 Base -T
  - b. 100 Base -T
  - c. 1000Base -T
  - d. 155 Mbps ATM
- C. Test Values:
- 1. Meet or exceed the criteria per ANSI/TIA/EIA – 568-B and Addendums for the level of testing specified above.
  - 2. Cables must have at least 1 dB headroom above minimum before considered passing.

END OF SECTION



## WIRING DEVICES

### PART 1 GENERAL

#### 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

#### 1.2 SUMMARY

- A. Section includes receptacles, device plates and box covers.

#### 1.3 REFERENCES

- A. NECA (National Electrical Contractors Association) - Standard of Installation.
- B. NEMA WD 1 (National Electrical Manufacturers Association) - General Requirements for Wiring Devices.
- C. NEMA WD 6 (National Electrical Manufacturers Association) - Wiring Device -- Dimensional Requirements.

#### 1.4 SUBMITTALS

- A. Division 1 and Section 26 05 00 – Common Work Results for Electrical.
- B. Product Data: Submit manufacturer's catalog information showing device characteristics, specification grade, UL listing, dimensions, colors, and configurations.

## PART 2 PRODUCTS

### 2.1 RECEPTACLES

- A. Manufacturers:
  - 1. Hubbell.
  - 2. Bryant.
  - 3. Arrow Hart.
- B. Duplex Receptacles: Specification Grade, Duplex NEMA 5-20R, 120 Volt, 20 Amp, UL 498 and FSUL WC596-G, back and side wired, nylon face.

### 2.2 DEVICE PLATES

- A. Decorative Cover Plate: One piece rounded edge "streamline" design flush device plates of commercial grade white nylon with countersunk screws to match device plate finish.

### 2.3 DEVICE COLOR

- A. General Switches, Receptacles: White.

## PART 3 EXECUTION

### 3.1 INSTALLATION

- A. Label device plate per Section 26 05 33 –Identification for Electrical Systems.
- B. Rigidly fasten outlet boxes and devices to prevent any play of device.
- C. Install in accordance with NECA "Standard of Installation."
- D. Clean debris from outlet boxes.
- E. Install devices plumb and level.
- F. Install receptacles with grounding pole on bottom.
- G. Connect wiring device grounding terminal to outlet box with bonding jumper and branch circuit equipment grounding conductor.
- H. Install decorative plates on receptacles.
- I. Install galvanized steel plates on outlet boxes and junction boxes in unfinished areas, above accessible ceilings, and on surface mounted outlets.

### 3.2 FIELD QUALITY CONTROL

- A. Test each receptacle, switch and sensor device per Section 26 08 00 – Testing of Electrical Systems.

### 3.3 ADJUSTING

- A. Adjust devices and wall plates to be flush and level.

3.4 CLEANING

- A. Clean exposed surfaces to remove splatters and restore finish.

END OF SECTION



## ELECTRICAL CLOSEOUT

### PART 1 GENERAL

#### 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements .
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

#### 1.2 SUMMARY

- A. Section includes:
  - 1. Project close out requirements.
  - 2. Project close out documentation.

#### 1.3 CLOSEOUT SUBMITTALS

- A. Provide project closeout requirements and documentation of the following items:
  - 1. Project Clean Up.
  - 2. Demonstration of Electrical System.
  - 3. O&M Manuals
  - 4. Record Drawings.
  - 5. Site Building Documentation.
  - 6. Shop Drawing Documentation

### PART 2 PRODUCTS

Not used.

## PART 3 EXECUTION

### 3.1 PROJECT CLEAN UP

- A. Clean-Up - Leave project completely free of debris resulting from electrical work and leave all electrical items clean.
- B. Repair – Paint to match existing any surfaces damaged during construction. Repair or replace any items damaged during construction.

### 3.2 DEMONSTRATION OF ELECTRICAL SYSTEM

- A. Electrical Inspection - Provide Owner with Certificate of Occupancy signed by the Inspector having jurisdiction.
- B. During final inspection, conduct an operating test for approval by Architect/Engineer. Demonstrate installation of the contract documents. Should any portion of the installation fail to meet requirements of Contract Documents, repair or replace items failing to meet requirements until items can be demonstrated to comply. Have instruments available for measuring voltage and current values, and for demonstration of continuity, grounds or open circuit conditions. Have personnel available to take measurements and make tests.
- C. Furnish assistant to Architect/Engineer for inspection at any time, as requested, to remove covers, operate machinery, perform continuity tests, and as necessary to demonstrate quality and adequacy.

### 3.3 OPERATION AND MAINTENANCE MANUALS

- A. Submittals shall comply with provisions of Division 1 and this section. Submit (3) copies of the manual no later than five (5) working days prior to final inspection.
- B. Manuals shall be assembled in three-ring binders. Binders shall be 3" thick or less, and more than one binder shall be used for each set of data if required to prevent overfilling. All information shall be arranged in the same order as the specifications, by equipment list item and by specific drawing call out as applicable, each section to identify equipment and specification number with a heavy paper divider with a protruding tab and label. The first section shall be the index. Shop drawings shall be 11" x 17" and shall be individually folded so they are 8-1/2" x 11" or less and inserted behind the appropriate tabs.
- C. General - Provide the following items as applicable for each product or system:
  - 1. Provide manufacturer's catalog cuts, brochures and descriptive literature. Highlight all applicable data or mark out information not applicable.
  - 2. Narrative/diagrams required describing procedures for start-up, operation, emergency operation and shut down of each system. If a particular sequence is required for operation, provide step by step instructions in chronological order.
  - 3. Outline seasonal adjustments required.
  - 4. Provide manufacturer's recommended preventative maintenance for each product, including time intervals for each task.
  - 5. Provide instructions for all adjustments and minor repairs. Provide troubleshooting information for lighting equipment, motor starters, panelboards, and special systems.
  - 6. Provide all information with regard to warranty and special requirements. Include copy of warranty, name, address and phone number of personnel to contact for warranty service.

7. Provide complete information on all replacement parts. Identify each part by manufacturer and part number (graphically when available).
8. Provide hard copy of each panelboard circuit directory and in excel format.

#### 3.4 TRAINING

- A. Provide training as denoted in Section 28 10 00.

#### 3.5 RECORD DRAWINGS

- A. Contractor shall maintain one set of the contract electrical drawings and specifications and Access Control and Video Intercom shop drawings of the most current issue on the job site and progressively record thereon any change in installation from that indicated on the drawings. Final approval will be withheld until drawings marked in a satisfactory manner are delivered to the project manager prior to substantial completion.
  1. Mark record drawings with red pencil actual installation that varies from the work originally shown.
  2. Include addendum and revisions items made during construction.
  3. Erase, white out or "X-out" to clearly convey as actual "as constructed" condition.
  4. Provide revised electrical plans with the "as constructed" conditions in electronic format. ASD will provide an Electronic copy of the plans in Autocad format for contractor use.
  5. Provide one complete as-built set in paper format and electronic format on CD.

#### 3.6 SITE BUILDING DOCUMENTATION

- A. Panelboard Circuit Directory.
  1. Provide panel circuit directory installed in each panelboard in accordance with Section 26 05 53.

END OF SECTION



## PATHWAYS FOR COMMUNICATIONS SYSTEMS

## PART 1 GENERAL

## 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

## 1.2 SUMMARY

- A. Section includes pathway support requirements for low voltage cabling.

## 1.3 REFERENCES

- A. National Electric Code (NFPA 70) Article 250 - Grounding.
- B. National Electric Code (NFPA 70) Article 800 - Communications Circuits.
- C. ANSI/TIA/EIA-568-B - Commercial Building Telecommunications Cabling Standards.
- D. BICSI Telecommunications Distribution Methods Manual - Latest published edition.
- E. UL Standards - UL 94HB, UL 723, and UL 2043.

## 1.4 SUBMITTALS

- A. Division 1 and Section 26 05 00 – Common Work Results for Electrical.
- B. Shop Drawings: Indicate support type, dimensions, support locations, and cable capacity. Information to be included on the telecommunication system shop drawing required in Section 27 10 00 Structured Cabling.

- C. Product Data: Submit fittings, cable capacity, mounting requirements, accessories and finishes.
- D. Manufacturer's Installation Instructions: Submit application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of Product.

#### 1.5 CLOSEOUT SUBMITTALS

- A. Project Record Documents: Record actual routing of cable tray and locations of supports on "As-built" drawing required in Section 27 10 00 Structured Cabling.

#### 1.6 QUALIFICATIONS

- A. The telecommunications work specified in this section is acknowledged to require special skills mastered by education, experience, or both. Refer to Section 27 10 00 Structured Cabling.

### PART 2 PRODUCTS

#### 2.1 J-HOOKS

- A. J-Hook Cable Support: Steel Hook, Cat 6 rated, with cable retainer clip. Provide minimum 3/4" J-Hook for branch runs and 1 5/16" for trunk runs or a necessary to maintain 25% percent spare capacity.
- B. Attachment Accessories.

### PART 3 EXECUTION

#### 3.1 EXISTING WORK

- A. Maintain access to existing cable tray and other installations remaining active and requiring access. Modify installation or provide access panel.

#### 3.2 SUPPORT AND ROUTING OF CABLES

- A. Provide continuous pathway system for all low voltage cable systems. Provide telecommunication system continuous cable support in accordance with Section 27 10 00 Structured Cabling.
- B. Maintain a minimum EMI separation clearance in conformance with Section 27 10 00 Structured Cabling.
- C. Support pathway from building to support structure or sub structure. Do not support pathway from ductwork, piping, or other equipment hangers.
- D. Support of cables by ceiling tiles, ceiling grid, hanger wires, or supports not rated Category 6 compliant is prohibited.
- E. Provide J-hooks spaced maximum of 5 feet on center. Coordinate all pathway runs with other trades prior to installation.

PATHWAYS FOR COMMUNICATIONS SYSTEMS

Division 27  
Section 27 05 28

- F. Provide all J-hook horizontal pathways sized to provide 50% spare cable capacity.
- G. Provide a minimum of 12 inches headroom above all types of cable supports.
- H. Provide a minimum of 3 inches clear vertical space above ceiling system at cable lowest point.
- I. Support trays and fasten to structure and finishes in accordance with Section 26 05 29 Hangars and Supports for Electrical Systems. Install supports at each connection point, at end of each run, and at other points to maintain spacing between supports of 4 feet maximum.
- J. Provide cable support within 18 inches of each transition of pathway system types. This includes transitioning from any one to any other of the following cable support systems such as raceway, sleeves, chases, cable trays, ladder rack, J-hooks, indoor service poles, and continuous cable support systems.
- K. Tie cable to cable trays with zip ties or Velcro every 4 feet.
- L. Route station cables and backbone cables at right angles to electrical power circuits.
- M. Set J-hooks so that taps or changes in direction do not exceed 45 degrees.
- N. Mount Category 6 rated J-hooks on metal channel using factory made attachment kits.
- O. Coordinate the layout of pathways with all other trades. Report conflicts to Contracting Agency for resolution by the Contracting Agency.

END OF SECTION



## STRUCTURED CABLING

## PART 1 GENERAL

## 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

## 1.2 SUMMARY

- A. Section includes backboards, pathways, cabinets, racks, termination devices, outlets, and premises wiring to install a structured Category rated telecommunication cabling system.
- B. Related Sections:
- |     |          |  |
|-----|----------|--|
| 1.  | 26 05 00 | Common Work Results for Electrical Systems       |
| 2.  | 26 05 19 | Building Wire and Cables                         |
| 3.  | 26 05 26 | Grounding  |
| 4.  | 26 05 29 | Hangers and Supports for Electrical Systems      |
| 5.  | 26 05 33 | Raceways and Boxes for Electrical Systems        |
| 6.  | 26 05 53 | Identification for Electrical Systems            |
| 7.  | 26 05 90 | Minor Electrical Demolition and Existing Systems |
| 8.  | 26 08 00 | Testing of Electrical System                     |
| 9.  | 26 27 26 | Wiring Devices                                   |
| 10. | 26 60 00 | Electrical Closeout                              |
| 11. | 28 10 00 | Electronic Access Control System                 |

## 1.3 REFERENCE CODES AND STANDARDS

- A. Design, manufacture, test, and install telecommunications cabling networks per manufacturer's requirements and in accordance with NFPA-70 (National Electrical Code), state codes, local codes, requirements of authorities having jurisdiction, and particularly the following standards:

1. ANSI/TIA/EIA-568-B – Addendums 1
2. ANSI/TIA/EIA-568-B.1 - General Cabling System Requirements
3. ANSI/TIA/EIA-568-B.2 - Balanced Twisted-Pair Cabling Components
4. ANSI/TIA/EIA-568-B.2-1 Category 6 Cabling
5. ANSI/TIA/EIA-569-A - Commercial Building Standard for Telecommunications Pathways and spaces
6. ANSI/TIA/EIA-606 - Administration Standard for the Telecommunications Infrastructure of Commercial Buildings.
7. ANSI/TIA/EIA-607 - Commercial Building Grounding and Bonding Requirements for Telecommunications
8. Install cabling in accordance with the most recent edition of BICSI publications:
  - a. BICSI - Telecommunications Distribution Methods Manual.
  - b. BICSI - Cabling Installation Manual.

#### 1.4 SYSTEM DESCRIPTION

- A. Backbone Pathway: Conform to EIA/TIA requirements using fiber cable in innerduct and copper cable (where specified), routed in continuous pathway support, J-hooks and conduit sleeves.
- B. Backbone Cabling:
  1. Voice: Complete physical star topology Cat 3 multi-conductor pair cable from the main distribution frame to each telecommunication intermediate distribution frame location.

#### 1.5 SUBMITTALS

- A. Submit product data under provisions of Division 1 and Section 26 05 00. Provide product literature, dimensional data, performance criteria, factory test results for cables and connectors. Provide product data for the following products:
  1. Copper Voice Backbone Cable.
  2. UTP Modular Patch Panel.
  3. UTP Patch Cables.
  4. Equipment Racks.
  5. Cable Management Panels.
  6. Cable Organizers.
  7. UTP Telecommunications Cable Tester.
- B. Shop Drawings
  1. Shop drawings denoting all details of the telecommunication system must be submitted and approved by ASD prior to commencement of installation.
  2. Prepare layout Shop Drawings using AutoCAD.
  3. Scaled drawings to show:
    - a. Building zone map denoting coverage of each equipment room or rack.
    - b. Floor plan of each zone denoting equipment room, rack locations and location of each station outlet with identification numbers adjacent to symbol. Scale of floor plan shall match Contract Drawings.
    - c. Minimum 1/4 inch enlarged plan of each equipment room. Plan must be large enough to show actual equipment layouts and to show that all equipment will fit in the intended space with no conflicts.
    - d. Telecommunications pathway routing denoting cable counts, pathway support type and capacity.
    - e. Location of rack service loop.

- f. Locations and sizes of all raceways, sleeves, and penetrations. Fire rated penetrations shall be specifically noted.
- g. Elevation of each equipment rack denoting equipment installed size of equipment, and physical location of equipment on the rack.
- h. Provide a one-line diagram of the Telecommunications system including: TR designations and room numbers; Equipment rack names and designations; grounding system denoting splices and all conductor sizes, names, and ground bars; optical fiber backbone system denoting type and quantity of fibers; UTP copper backbone inter-ties denoting quantity; voice backbone denoting pair count and demarc. Provide grounding system layout on the floor plan drawings.

#### 1.6 OPERATING AND MAINTENANCE MANUALS

- A. Submittals Division 1 and Section 26 05 00 – Common Work Results for Electrical
- B. Provide all information included in the approved submittal.
- C. Description of routine maintenance required, suggested frequency of maintenance and recommended practices.
- D. 11-inch by 17-inch reduced size “As-built” drawings. Fold drawings accordion style to fit in standard size notebooks.
- E. Provide three full size bond sets of as-built drawings an electronic copy with plot configuration information denoting pen width and shading requirements on CD-ROM in AutoCad “DWG” format to the owner within four (4) weeks of acceptance of project by the owner.

#### 1.7 QUALIFICATIONS

- A. The telecommunications work specified in this Section is acknowledged to require special skills mastered by education, experience, or both.

#### 1.8 COORDINATION

- A. The necessity to coordinate this work with the Owner and the Contracting Agency is emphasized. The Contractor shall be responsible for any omissions, delays and additional cost due to lack of coordination or approval from the same.
- B. Coordinate all work with lighting, power, ventilation, sprinklers and other systems in the communication rooms to avoid interferences.
- C. Continuity of Service:
  - 1. Take no action that will interfere with, or interrupt, existing building services unless previous arrangements have been made with the Owner's Representative. If system shutdown is required arrange the work to minimize shutdown time.
  - 2. Owner's personnel will perform shutdown of operating systems. The contractor shall give three (3) days advanced notice for systems shutdown.
  - 3. Should services be inadvertently interrupted, immediately furnish labor, including overtime, material, and equipment necessary for prompt restoration of interrupted service.

- D. Use of site:
  - 1. Use of the site shall be at the Owner's direction in matters in which the Owner deems it necessary to place restriction.
  - 2. Access to building wherein the work is performed shall be as directed by the Owner.
  - 3. The Owner will occupy the premises during the entire period of construction for conducting normal business operations. Cooperate with the Owner to minimize conflict and to facilitate the Owner's operations.

## 1.9 TERMINOLOGY

- A. Backbone Cables - Copper or optical fiber cables connecting main cross-connect facilities or intermediate cross-connect facilities.
- B. Cable Management – Troughs, gutters, management panels, etc., mounted in conjunction with telecommunications distribution equipment and terminal blocks, for the routing of cables and patch cords in a neat and workmanlike manner.
- C. Data – Generic term for Structured Telecommunication Distribution System cabling and hardware infrastructure internal and external to a building or buildings used to transmit voice and data, etc.
- D. Horizontal Cables –Cables connecting patch panels or terminal blocks in the Telecommunications Rooms to the outlet jacks.
- E. Jacks or Ports - Female mechanical termination device for horizontal cables.
- F. LEC - Local Exchange Carrier Serving Utility.
- G. Outlets - Device plate that contains jacks or ports.
- H. Patch Panels – Rack mounted connecting hardware to connect horizontal or backbone cables to an arrangement of fixed connectors using patch cords or to form cross or interconnections.
- I. Pathways –A facility for the placement, support, and protection of telecommunication cables.
- J. Rack – Mounting frame to support telecommunication equipment, patch panels, etc.
- K. Telecommunications Rooms (TR) – Space for housing telecommunications equipment, cable terminations and cross-connect wiring.
- L. Terminal Blocks - Multiple punch down cable terminations.

## 1.10 ACCEPTABLE MANUFACTURERS

- A. Provide products of manufacturers as named in individual articles
  - 1. Submittals to be approved by Engineer, ASD project manager, before installation.
  - 2. Where no manufacturer is specified, provide products of manufacturers in compliance with requirements.

3. Any item of equipment or material not specifically addressed on the drawings or in this document and required to provide a complete installation shall be provided in a level of quality consistent with other specified items.
  4. Provide products that are suitable for intended use, including, but not limited to environmental, regulatory, and electrical requirements.
- B. Structured cabling system will include copper cable, patch panels, patch cords, and connecting hardware. Provide all equipment from one of the following list of approved manufacturers structured systems: Ortronics/Superior Essex, Leviton/Berk-tek, Systimax, Corning Cables Systems.

## PART 2 PRODUCTS

### 2.1 PATCH PANELS

- A. Data Patch Panels: 1RU, HDJ series, Black, 24 Port Category 6. Install the number of patch panels in each equipment rack as shown on the drawings or as required to terminate all UTP cables at the rack plus ten (10) percent spare capacity. Each patch panel shall be provided with integrated rear cable management bar.
1. Ortronics "Clarity6" #OR-PHDHJU24 or approved equal

### 2.2 JACKS

- A. Cat 6 High Density Jack: HDJ, rear loading, POE compatible, Universal T568A/B wire label, 8 position, Verified to TIA Category 6 component specification. Shall be approved for use with the horizontal cabling by manufacturer. Install the number of jacks in each patch panel as shown on the drawings or as required to terminate all UTP cables at the rack. Each patch panel shall be provided with integrated rear cable management bar.
1. Voice Only (black): Ortronics #OR-HDJ6-00 or approved equal.
  2. Data (blue): Ortronics #OR-HDJ6-36 or approved equal.
  3. Intercom/Paging (yellow): Ortronics #OR-HDJ6-44 or approved equal.
  4. IP Video (green): Ortronics #OR-HDJ6-45 or approved equal.
  5. Wireless (white): Ortronics #OR-HDJ6-88 or approved equal.
  6. Building Automation/Other (grey): Ortronics #OR-HDJ6-78 or approved equal.

### 2.3 PATCH CORDS

- A. Patch Panel Patch Cords: All patch cords shall be factory made and certified. Field manufactured patch cords are not allowed. Provide one round Category 6 Enhanced rated, green, four pair, 24 AWG twisted stranded copper conductors for each terminated patch panel port. Deliver patch cords to installation site and deliver ASD representative signed packing slip to ASD Project Manager.
1. Ortronics #OR-MC-607-05 or approved equal.

### 2.4 HORIZONTAL CABLING

- A. Copper Horizontal Cable: Plenum rated, Category 6 compliant, Category 6 enhanced performance, copper 23 AWG, yellow, 4 pair, UTP.
1. Berk-Tek - Lanmark 1000
  2. Superior Essex – Nextgain

- B. Exterior Rated Cable: Plenum rated, Category 6 compliant, Category 6 enhanced performance, copper 23 AWG, blue, 4 pair, UTP.
  - 1. Superior Essex – Cat 6 CRM/CMX Outdoor Sunlight Resistant or approved equal.

## 2.5 HORIZONTAL CABLE MANAGEMENT

- A. Provide 1RU blank plate above and below every group of two 24 port 1RU patch panels.

## 2.6 VERTICAL CABLE MANAGEMENT

- A. Vertical Cable Management: Double-sided wide vertical section 7 feet high by 6.0 inches wide by 12.75 inches deep. Provide vertical cable management on each side of all racks installed with one vertical cable management between multiple adjacent racks. Mount front of vertical cable management flush with front of vertical rack rails. Vertical cable management sides must not block patch cable pathway.
  - 1. Chatsworth Products #11729-503.

## 2.7 SINGLE-MODE FIBER OPTIC BACKBONE

- A. Indoor Single-mode Fiber Cables: All single-mode fiber optic backbone cables that are used only inside the building envelope shall be UL listed, plenum-rated, non-conductive, tight buffered, indoor, fiber optic cable meeting National Electrical Code plenum OFNP standards. The cable shall have a UV-stabilized, flame-resistant PVC outer jacket, and operate in a range from 0°C to 70°C.
  - 1. For use in an innerduct system Corning “MIC” series #012E88-33131-29 or approved equal
  - 2. Non-metallic Armored Cable for use without an innerduct system Corning “MIC” series #012E88-33131-D3 or approved equal

## 2.8 FIBER CONNECTORS

- A. All fibers shall be field-installable with duplex LC UPC type connectors with ceramic ferrule. Fusion splices are required. Mechanical splicing is not allowed.
  - 1. Single-mode: Corning “FuseLite” #FL2-LCU-900-SM-25 or approved equal.

## 2.9 FIBER CONNECTOR PANELS

- A. All fiber connector panels shall each have with 6 pair LC OS2 adapters with ceramic sleeve and fiber designation strip.
  - 1. Single mode in a new or existing Corning Housings: Corning #CCH-CP12-A9 panel.
  - 2. Single mode in an existing Ortronics Housing: Ortronics #OR-OFP-LCD12AC panel.

## 2.10 FIBER CONNECTOR HOUSING

- A. All fiber connector housings shall have LC fiber capacity of 96
  - 1. Single mode: Corning #CCH-02U or approved equal panel with 2 fiber connector panels.

2.11 FIBER STORAGE RING

- A. Leviton #48900-IFR or approved equal 12-inch diameter inside plant fiber storage ring with Velcro retaining loops. Provide one storage ring in each closet, adjacent to the rack where the fiber cables are terminated.

2.12 CABLE SUPPORT

- A. All cables not installed in conduit shall be supported in accordance with Section 270528. POWER PROTECTION STRIP

2.13 Power Protection Strip: Rack mounted UL 1449 330/400 clamping voltage, twelve on/off switch controlled 3 prong 120 Volt outlets with 12 foot cord. Unit protects Normal/Common Modes: 33,000/26,000 Peak Milliamps, 50-60 dB. Provide one power protection strip mounted on each installed rack.

- A. Tripp-Lite ISOBAR12/20ULTRA.

2.14 CROSS CONNECT TERMINATION BLOCK

- A. Voice Grade Cross Connect Block: 66 type, 6 x 50 Block, 50 pair capacity, wall mounted punch down block.

- 1. Siemon S66B3-50 with S20A cable management as required.

- B. Cross Connect Block: 110 type, 100/pr block with C110-4 4/pr connector terminals or KRONE FT series block.

- 1. KRONE # 6642-1-115-04.
  - 2. Leviton 41DBR-1F4
  - 3. Ortronics # OR-30200145 / OR-30200110
  - 4. Systimax # 110AW2-100/ C110-4
  - 5. Siemon # S110AB2-100FT

2.15 BACKBOARDS

- A. Plywood Backboard: Type A-C plywood, 0.75 inch thick, painted with intumescent flame retardant base coating over entire surface area. Final coat of white on all exposed surfaces.

- B. Cable Organizers: Provide cable support brackets and cloth tie wraps for all cables routed on backboard.

PART 3 EXECUTION

3.1 GENERAL INSTALLATION

- A. Keep up to date "As-built" record drawings at each job site detailing the layout and field modifications to the Shop Drawings. Update the Shop Drawing electronic copy with the field red-lined changes.

- B. Pathway Separation Clearances:

- 1. Provide 6" minimum clearance from bottom of telecommunication pathway to ceiling tile and T-bar ceiling and 12 inches clear space above cable trays for access.

2. Do not route telecommunication cables adjacent and parallel to unshielded and ungrounded power cabling.
3. Do not route raceways over or adjacent to boilers.
4. Do not route pathways in the floor slab of the telecommunication room.
5. Provide the following minimum separation for telecommunication pathways as summarized in the following table:

EMI Source Condition	Minimum Separation Distance in Inches 480 V or Less		
	<2 KVA	2-5KVA	>5KVA
Fluorescent and HID Light fixtures, unshielded power conductors, or electrical equipment to open non-ferrous telecommunication pathways	5	12	24
Unshielded power conductors or electrical equipment to grounded ferrous metal telecommunication pathways	2.5	6	12
Power conductors in enclosed in grounded ferrous metal conduit to grounded ferrous metal conduit telecommunication pathways	-	3	6

### 3.2 CABLE INSTALLATION

- A. Follow cable manufacturer's specification regarding handling methods, retaining/support methods, bending radius and maximum pulling tension limitations. Use a tension-monitoring device to ensure that the maximum pulling tension that may be applied to the cable to be pulled into a conduit section is not exceeded. Provide replacement cable if cable manufacturer's maximum pulling tension is exceeded at any time during a pull.
- B. Cable shall be carefully inspected for sheath defects or other irregularities as it is paid out from the reel. When defects are detected, pulling shall stop immediately and the cable section shall be repaired or replaced at the discretion of the Contracting Agency. A system of communications shall be maintained between pulling and feed locations so that pulling can be stopped instantly, when required.
- C. Adequate care shall be exercised when handling and storing reels of cable to prevent damage to the cable. Cable with dents, flat spots, or other sheath distortions shall not be installed.
- D. Telecommunication cables shall not be installed in the same raceway or pathway as power cables.
- E. Cables to be installed in raceway, cable tray, continuous cable support system or J-hooks the entire length of each cable. Provide raceway through areas that will not be accessible for future cable replacement or additions.
- F. Install station cabling to the nearest communications telecommunication room, unless otherwise noted.
- G. Install cables in one continuous piece. Splices will not be allowed.
- H. Adhere to manufacturer's published specifications for pulling tension, minimum bend radii, and sidewall pressure when installing cables.

- I. Do not deform cable insulation when cable wraps or supports are installed.
- J. Where manufacturer does not provide bending radii information, provide a minimum bending radius of 10 times cable diameter.
- K. Install 2-foot cable service loop for all horizontal cable at the last J-hook nearest the workstation outlet or as near as possible to the outlet when J-hooks are not installed.
- L. Install 10-foot cable service loop for each horizontal and back bone cable at or within 10 feet of the telecommunication rack.
- M. If installation allows, route the service loop around the back of the rack, inside the vertical cable organizer, across the bottom and up the other side to the termination point. No cables shall encroach or interfere with rack equipment space. All cables shall be protected from physical damage and shall not be routed on the floor.
- N. Installation of CAT-3 Voice cabling on CAT 5/6 Patch Panel shall be per Exhibit 1.

### 3.3 PATCH PANEL

- A. When mounting 24 port, 1RU patch panels in 19 inch rack, provide a 1RU blank panel between every set of two patch panels. Coordinate layout with ASD representative.

### 3.4 TERMINATIONS

- A. When terminating cable, only remove as much cable jacket as needed to terminate properly to the connecting hardware. No more than .5 inch of jacket shall be removed.
- B. Wire twist shall be maintained to within 0.25" of the terminal block fingers.
- C. Pairs from each cable shall be terminated sequentially from left to right, top to bottom starting with the lowest assigned number at the upper left-hand corner of the panel.
- D. Fibers shall be terminated sequentially from left to right in connector housing, based on standard color code sequence of individual fiber coatings. All Remote closet fiber pairs shall be rolled.

### 3.5 PATHWAYS

- A. Provide cable pathway and support where not installed in raceway in conformance with Section 27 05 28 Pathways For Communications Systems.

### 3.6 RACEWAYS

- A. Provide raceway, sleeves, junction boxes and outlet boxes required for telecommunication pathways in conformance with Section 26 05 33 Raceways and Boxes for Electrical Systems.

### 3.7 LABELING SYSTEM

- A. Labeling shall conform to ANSI/TIA/EIA standards and shall match existing naming scheme.

3.8 GROUNDING

- A. Grounding shall conform to ANSI/TIA/EIA Standards, National Electrical Code.

3.9 TESTING

- A. Provide testing per Section 26 08 00 Testing of Electrical System.

Exhibit 1

**Color Code Sequence for Multipair Cat-3 (Voice) Termination on Cat  
 5/6 Patch Panel**

PAIR 1	WHITE / BLUE BLUE / WHITE	W H I T E	PORT 1
PAIR 2	WHITE / ORANGE ORANGE / WHITE		
PAIR 3	WHITE / GREEN GREEN / WHITE		
PAIR 4	WHITE / BROWN BROWN / WHITE		
PAIR 5	WHITE / SLATE SLATE / WHITE		
PAIR 6	RED / BLUE BLUE / RED	R E D	PORT 2
PAIR 7	RED / ORANGE ORANGE / RED		
PAIR 8	RED / GREEN GREEN / RED		
PAIR 9	RED / BROWN BROWN / RED		
PAIR 10	RED / SLATE SLATE / RED		
PAIR 11	BLACK / BLUE BLUE / BLACK	B L A C K	PORT 3
PAIR 12	BLACK / ORANGE ORANGE / BLACK		
PAIR 13	BLACK / GREEN GREEN / BLACK		
PAIR 14	BLACK / BROWN BROWN / BLACK		
PAIR 15	BLACK / SLATE SLATE / BLACK		
PAIR 16	YELLOW / BLUE BLUE / YELLOW	Y E L L O W	PORT 4
PAIR 17	YELLOW / ORANGE ORANGE / YELLOW		
PAIR 18	YELLOW / GREEN GREEN / YELLOW		
PAIR 19	YELLOW / BROWN BROWN / YELLOW		
PAIR 20	YELLOW / SLATE SLATE / YELLOW		
PAIR 21	VIOLET / BLUE BLUE / VIOLET	V I O L E T	PORT 5
PAIR 22	VIOLET / ORANGE ORANGE / VIOLET		
PAIR 23	VIOLET / GREEN GREEN / VIOLET		
PAIR 24	VIOLET / BROWN BROWN / VIOLET		
PAIR 25	VIOLET / SLATE SLATE / VIOLET		

END OF SECTION



## ELECTRONIC ACCESS CONTROL SYSTEM

## PART 1 GENERAL

## 1.1 NOTIFICATIONS

- A. Notification of Potential Hazards: Asbestos, lead and other potentially hazardous materials are present in the building that may impact the work of all trades. Regulated air contaminants, including asbestos and lead are also present in the settled and concealed dust in and on architectural, structural, mechanical, and electrical components or systems throughout the building. All trades shall coordinate with other trades and conduct their work to prevent worker exposure or site contamination. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements .
- B. Notification of Child Occupied Facility: Portions of this building are classified as a Child Occupied Facility in accordance with 40 CFR 745 and lead-based paint has been identified on components to be disturbed in those areas. Personnel performing work in these areas must comply with the requirements of 40 CFR 745, including training, work practices and cleaning of the specific information concerning disturbing, removing and disposing of lead materials and the installation of new materials or components. Refer to Specification Divisions 0, 1 and 2 for specific information concerning disturbing, removing, and disposing of these materials and the installation of new materials or components. This notification is provided in accordance with the EPA and OSHA requirements.

## 1.2 SECTION INCLUDES

- A. Contractor designed and installed access control system.
- B. Access control system wire and cable.
- C. Video intercom system.

## 1.3 RELATED SECTIONS

- |    |          |   |
|----|----------|---|
| 1. | 26 05 00 | Common Work Results for Electrical Systems  |
| 2. | 26 05 19 | Building Wire and Cables                    |
| 3. | 26 05 26 | Grounding                                   |
| 4. | 26 05 29 | Hangers and Supports for Electrical Systems |
| 5. | 26 05 33 | Raceways and Boxes for Electrical Systems   |
| 6. | 26 05 53 | Identification for Electrical Systems       |
| 7. | 27 10 00 | Structured Cabling                          |

## 1.4 SYSTEM DESCRIPTION – ACCESS CONTROL SYSTEM

- A. Provide all equipment, materials, labor, documentation and services necessary to furnish, install, calibrate, adjust, and test a complete and operational Access Control System, as required herein and as indicated on the Drawings. The system consists of, but is not limited to the following functions and capabilities:
  - 1. Access Control for authorized individuals.

2. Global system access for administration, programming, monitoring, and maintenance. The system shall be connected to the ASD LAN for system-wide access and administration once established.
- B. The system equipment and installation shall comply with all provisions and requirements of this specification, as well as any and all applicable national, state and local codes and standards.
- C. System Components: The basic components of the Access Control System shall include:
1. Access Control Panel (ACP), including card reader controller, input and output modules, power supply, and all components required to add devices to the system
  2. Door hardware, including electrified exit device, latch retraction kit, electric hinge/power transfer device, keyed electric switch, and all other components required to provide control of doors identified on the drawings.
  3. Magnetic contacts, proximity card readers, and other devices shall be provided as specified in the Contract Documents. Unless otherwise noted on the Drawings, each field device (sensor or contact) shall have a dedicated input on the access control system and shall have a unique point name, as described on the Drawings. Exceptions where multiple devices are connected to a single input are as follows:
    - a. Multiple sets of door contacts at double doors.
  4. New software, including installation of new ASD-furnished appliance/server or client workstation computer.

#### 1.5 FUNCTIONAL DESCRIPTION AND SEQUENCE OF OPERATIONS

- A. A new access control system will be provided for the school. At selected perimeter doors, a new card reader and door contact will be provided. The electrified hardware specified under Division 8 will be connected to the system for control of these doors. New door controllers will be located in the telecom rooms for central connection of the system cabling. A door power supply will be located in the telecom room for all doors. The software to be installed will be the "Open Path" system recently selected by ASD.
- B. All doors will have an electric keyswitch on the wall nearby. At the main entry vestibule, there will be an inner and outer keyswitch that shall control both doors in each opening. The keyswitches will be connected to the access control system so that doors can be locked/unlocked regardless of switch position.
- C. Both sets of main entry vestibule doors and the new door into the Admin Area will receive electrified hardware. The outer vestibule door with the video intercom station will have a card reader, as will the new door into Admin. The inner vestibule doors and second outer vestibule door will be electrified but will not be card reader controlled.
- D. New lockdown buttons will be provided at both Admin positions and the Principal's office. These will be connected to the access control system and will relock any doors that are unlocked via either keyswitch or access control system. Activation of lockdown button will also release all magnetic door holders in the school, which will allow for classrooms and corridors to be secured automatically. Staff fobs shall be turned off in the event of a lockdown. Law Enforcement fobs shall still work.
- E. All doors shall be configured to unlock for 5 seconds and then re-lock when controlled by card reader, pushbutton, or video intercom system. Pushbutton and video intercom system shall be configured as momentary contact.

Sequence of Operations - Typical

- F. Perimeter Doors (other than main entry): Doors are normally locked at all times. Door can be electrically held unlocked via keyswitch or access control system if desired. Presentation of valid proximity card at the reader will unlock the door. Door contact will report the door open to the access control and intrusion detection systems. Latchbolt monitoring and door contact can be connected in series for these doors. Door shall have free egress at all times, though request-to-exit switch in electrified exit device will report to the access control system to validate authorized opening. Activation of lockdown button at any position in Admin will resecure the door if unlocked via keyswitch or access control system.
- G. Main Entry Vestibule, Outer: Double doors are normally locked during school hours. Both doors are unlocked during drop-off/pick-up, and at other times as decided by the school. Door closest to the office in this opening (typical, may change on some sites) will be controlled via card reader and video intercom system. Both doors will be controlled by wall-mounted keyswitch. Lockdown secures both doors. New automatic door operator will be provided on the same controlled door as card reader and intercom. Outer actuator will only be active when door is unlocked. Inner actuator will always be active, and will signal the door power supply to retract the latch and then open the door. Video intercom will open outer vestibule door via separate release button from Vestibule to Admin door on the master station screen. Door release pushbutton will be provided for manual control.
- H. Main Entry Vestibule, Inner: Doors are normally locked during school hours. Doors are unlocked during drop-off/pick-up, and at other times as decided by the school. No card reader/intercom will be provided at these doors. Both doors will be controlled by wall-mounted keyswitch. Latchbolt monitoring and door contact can be connected in series for these doors and reports to access control system only. Lockdown secures both doors. New automatic door operator will be provided on one door, with left/right position to be determined site by site. Actuator in the vestibule (heading into the school) will only be active when door is unlocked. Actuator inside of the school (exiting the building) will always be active, and will signal the door power supply to retract the latch and then open the door.
- I. Vestibule to Admin Door: Door is normally locked at all times except as follows. Doors are unlocked during drop-off/pick-up, and at other times as decided by the school. Door will have a card reader for authorized personnel. Door will be controlled by wall-mounted keyswitch and manual pushbutton. Door contact shall report to the access control system. Door can be electrically held unlocked via keyswitch or access control system, or unlocked via pushbutton in the Admin area. Lockdown secures door. No automatic door operator will be provided on this door. Video intercom will open outer vestibule door via separate release button from Outer Vestibule door on the master station screen. Door release pushbutton will be provided for manual control. When door is locked, an audible alarm shall sound if door is propped open for more than 30 seconds.
- J. Indicator Lights – color scheme
1. Lockdown button:
    - a. Red – lockdown is activated
    - b. Green – normal state
    - c. On the lockdown buttons not used to initiate the event, illuminate both indicator lights to notify staff that a lockdown is in place.
  2. Key Switch:
    - a. Red – door is locked
    - b. Green – door is unlocked

3. Door Release Pushbutton:
  - a. Red – door is locked
  - b. Green – door is unlocked
  - c. Note that pushbutton will only change state when actively being used to release door, so will not necessarily correspond with keyswitch state if door is being held electrically unlocked.

## 1.6 SUMMARY – VIDEO INTERCOM SYSTEM

- A. Provide all equipment, materials, labor, documentation and services necessary to furnish, install, calibrate, adjust, and test a complete and operational Video Intercom System, as required herein and as indicated on the Drawings. The system consists of, but is not limited to the following functions and capabilities:
  1. Identification of visitors at locations indicated on the drawings.
  2. Communication with the school administrative offices and ability to remotely unlock doors to allow entry.
  3. Integration with school's video surveillance system to display the camera views on the video system monitors and record the video output from the field station(s).
- B. Video Intercom Settings:
  1. Video shall be available on all master stations during any call, regardless of which station answers.
  2. Master stations shall be able to call to field stations without activation from the field station first.
  3. All master stations shall quit ringing once a call is answered by one of them.
  4. Master station in Principal's office shall only ring once call has gone unanswered for 5 rings at the other positions.

## 1.7 SUBMITTALS

- A. Submit product data under provisions of Division 1 and Section 26 05 00.
- B. Provide manufacturer's data sheets on all equipment proposed for use on this project.
- C. Manufacturer's Installation Instructions: Indicate application conditions and limitations of use stipulated by Product testing agency. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of Product.
- D. Electronic AutoCad® drawings of the building floor plans are available upon request for preparation of the shop drawings. All device locations shall be field verified by the Contractor prior to completion of the shop drawings.
- E. Provide contract-size shop drawings that include the following information:
  1. Locations of all equipment and field devices, as well as routing of all cables with the number and size of conductors in each run. Scale of floor plan shall match Contract Drawings.
  2. Locations and sizes of all raceways, sleeves, and penetrations. Fire rated penetrations shall be specifically noted.
  3. Provide a one-line diagram for the facility that shows the signal relationships of all new devices within the system.
  4. Provide voltage drop and battery calculations for each new ACP, including all connected devices. Calculations shall include estimated time system will run without utility AC power in non-alarm state. All calculations shall be shown on the Drawings.

5. For each major component, such as an ACP, show a typical detail of all wiring connections to the equipment. This detail shall include all wire/cable color-coding and all identification tags where applicable.
6. Indicate electrical characteristics and connection requirements, including line voltage and low voltage wiring, and logic diagrams or block diagrams where required. All text on the drawings shall be legible without magnification when the shop drawings are reduced to 11" x 17".
7. Shop drawings denoting all details of the system must be submitted and approved by the Owner prior to commencement of installation.
8. Shop drawings for all systems in this specification may be combined into a single set of drawings.

## 1.8 CLOSEOUT DOCUMENTS

- A. Submit documents under provisions of Division 1.
- B. Accurately indicate actual location of all devices and controlling equipment, including ACPs, power supplies, proximity card readers, magnetic contacts, relays, electrified door hardware, etc. All field devices shall be shown with their actual device addresses.
- C. Show the location and routing of all conduit and cables, including locations of major pull and junction boxes.
- D. Include a reduced set (11" x 17") set of the project record drawings in the Operation and Maintenance Manual.
- E. Provide operation and maintenance instructions including detailed electronic schematic drawings, detailed parts list and exploded view of all equipment, detailed troubleshooting instructions and a reduced set of the project record drawings.
- F. Provide detailed instructions on downloading/uploading system software updates.
- G. Program Documentation: Provide two electronic copies of the System Software Program to aid in future maintenance, troubleshooting and modification of the security system.

## 1.9 QUALITY ASSURANCE

- A. The Systems Integrator shall submit qualifications in accordance with Division 1. Qualifications shall include the following:
  1. The entire access control system shall be installed and programmed by a Systems Integrator. The Systems Integrator shall be certified to install the access control system and shall have a minimum of three years documented experience installing and programming access control systems in the State of Alaska. Documentation of previous experience shall include at least three (3) similar projects where a system of this type has been installed.
  2. Where the Integrator is a branch office or other division of a larger organization, the qualifications of the branch office or other division shall meet the requirements of the Contract Documents.
  3. The Security Integrator shall provide documentation that at least one field installer is certified to install the access control system. The Contractor shall submit qualifications of the On-Site Installer prior to start of work.

### 1.10 WARRANTY

- A. Warrant all materials and equipment to be new and free from defects in material and workmanship for a period of one year under provisions of Division 1.
- B. Thirty days prior to the expiration of the maintenance contract, the Integrator shall contact the Owner's Representative to determine if any adjustments or reprogramming are necessary to maintain proper operation of the security system. If any adjustments or reprogramming are necessary, they shall be done at no cost to the Owner.

### 1.11 SPARE MATERIAL

- A. Provide the following spare parts for the access control system:
  - 1. Proximity Card Reader: One standard and one million proximity card reader.

## PART 2 PRODUCTS

### 2.1 MATERIALS AND MANUFACTURERS

- A. This specification is based on the "Open Path" access control system. Where products are listed as "or approved equal", these citations are for the purpose of establishing quality and performance criteria. All components provided shall be listed for use (if applicable) and compatible with the referenced system. All decisions regarding approval of non-specified manufacturers and products will be at the discretion of the Owner.
- B. Where no manufacturer is specified, provide products of manufacturers in compliance with requirements. Any item of equipment or material not specifically addressed on the drawings or in this document and required to provide a complete installation shall be provided in a level of quality consistent with other specified items.
- C. The Contractor shall provide the latest product model and software version available from each manufacturer at the time of installation. No "beta version" or "test software" products will be accepted. All proposed and provided equipment and/or products shall be from the specified and approved manufacturers only, unless previously approved by the Engineer and/or Owner.
- D. All products and materials are to be new and free of defects, damage and corrosion. All materials shall be in compliance to all applicable codes and designed specifically for the function intended.
- E. Quantity and location of all devices and equipment shall be as specified in Contract Documents or as required for a complete and operable system.

### 2.2 SYSTEM SOFTWARE

- A. "Open Path" Access Control System. NO SUBSTITUTIONS.

### 2.3 ACCESS CONTROL PANEL (ACP)

- A. Control panel shall be assembled with card reader controller, input modules, output modules, power supply, and network interface for LAN connection.
- B. Firmware: The modules shall be provided with the most current version of the firmware, if applicable.

- C. Enclosure shall have tamper switch and flushlock keyed to match all other security system cabinets.
- D. Enclosure shall have a custom termination drawing/point list affixed to the inside panel front that shows connection details of all local input/output points. The documentation shall be specific to each new cabinet.
- E. Quantity and locations of all ACPs shall be as specified in the Contract Documents or as required for a complete and operable system.
- F. ACP shall have direct connection to 120V circuit. Cord and plug is not acceptable.

## 2.4 INPUT DEVICES

- A. Magnetic Contacts:
  - 1. Unless otherwise noted on the Drawings, all door contacts shall be recessed type.
  - 2. Recessed Contacts: Where noted, provide DPDT contacts to replace existing, with input/output to both the existing building security system and the new access control system.
  - 3. ACSI 1335 series, DPDT where indicated (-4 option)
- B. Proximity Card Readers: HID "iClass SE" smart proximity card readers. Provide standard R40 or mullion-style R10 readers per the drawings or as field conditions require. Note that due to the long lead on these readers, a version without prox is currently being produced to enable iClass fobs to be used.
- C. Provide connection to locksets with integral latch indicators/REX.
- D. Door Hardware:
  - 1. Key Switch
    - a. ACSI 1310-2-MTN, maintained action
    - b. With Status indicator lights.
    - c. Key switch shall be connected to the access control system to release the door upon command.
  - 2. Emergency Lockdown switch
    - a. ACSI 1320-5-1-NO/NC-MTN,
    - b. Mushroom switch, maintained action
    - c. With red and green status indicator lights (1 each)
    - d. Mount assembly in standard 2 1/8 deep single gang handy box
    - e. Lockdown switch shall be connected to access control system input. All electrically held doors shall be released upon signal.
  - 3. Door Release Pushbutton
    - a. ACSI 1320-3
    - b. Single gang pushbutton
    - c. With momentary action
    - d. With red and green status indicator lights (1 each)

## 2.5 WIRE AND CABLE

- A. Power Cable: West Penn #25224 or approved equal plenum-rated, 1-pair, 18 AWG, stranded tinned copper conductors, unshielded twisted pair, 300-Volt insulation, rated 90° C, with an overall plenum jacket.

- B. Door Contact/Alarm Input Cable: West Penn #25222 or approved equal 1-pair, 20 AWG, twisted, unshielded, stranded tinned copper conductors, 300-Volt FEP insulation, rated 90° C, with an overall plenum jacket.
- C. Card Reader Cable: West Penn #253270B or approved equal 6-conductor, 22 AWG, stranded tinned copper conductors, 100% overall foil shield, drain wire, 300-Volt insulation, with an overall plenum jacket.
- D. Relay Output Cable: West Penn #25225 or approved equal 1-pair, 16 AWG, twisted, unshielded, stranded tinned copper conductors, 300-Volt FEP insulation, rated 90° C, with overall plenum jacket.
- E. Interconnect Cable: Plenum-rated, 18 AWG, twisted, shielded or unshielded (as required or recommended by manufacturer), stranded tinned copper conductors, 300-Volt FEP insulation, rated 90° C, and plenum jacket.
- F. Category 6 patch cords for connection of ACP to telecom rack: Length as required, match type specified in Specification Section 27 10 00.
- G. Provide 3M Schotchlok UR2 connector or equal on wiring between electric hinge and electrified exit device for future maintenance.

## 2.6 ACCESS CONTROL SYSTEM LABELING

- A. Per Specification Section 26 05 53.

## 2.7 ACCESS CONTROL SYSTEM CREDENTIALS

- A. ASD-provided. Input credentials into the system. Assume 150 credentials for bidding purposes.

## 2.8 ACCESS CONTROL SYSTEM COMPUTERS

- A. ASD-provided.

## 2.9 VIDEO INTERCOM SYSTEM

- A. Where indicated on the drawings, provide a video intercom field station. 2N "IP Force" or equal vandal-resistant, exterior-rated field station with integral microphone, speaker, and IP-based camera. Connect to telecom rack with green cable.
- B. Where indicated on the drawings, provide video intercom master stations. 2N "IP Touch" or equal touchscreen unit with door release functions.

## PART 3 EXECUTION

### 3.1 EXAMINATION

- A. Prior to beginning equipment installation, examine areas to receive equipment. Verify that all conditions are acceptable.

### 3.2 INSTALLATION

#### A. General:

1. Install all equipment in accordance with the manufacturer's instructions and drawings. Coordinate locations of all sensors and magnetic contacts to provide optimum performance in the associated area.
2. Keep up to date "As-built" record drawings at the job site detailing the layout and field modifications to the Shop Drawings. Update the Shop Drawing electronic copy with the field red-lined changes.
3. Unless otherwise noted on the Drawings, all control equipment panels shall be mounted where they are accessible for maintenance and testing. Panels shall not be mounted above accessible ceilings. The maximum mounting height to the top of the enclosure shall be +8'-0" AFF or 6" below the ceiling, whichever is lower.
4. Pathway Separation Clearances:
  - a. Provide 3" minimum clearance from bottom of security system pathway to ceiling tile and T-bar ceiling and 12 inches clear space above cable trays for access.
  - b. Do not route cables adjacent and parallel to unshielded and ungrounded power cabling.
5. Do not route raceways over or adjacent to boilers.

#### B. Environmental Conditions:

1. Components mounted in locations exposed to weather shall be housed in corrosion resistant enclosures with appropriate environmental protection. Component performance shall not degrade because of improper housing design.
2. Components in enclosures shall meet manufacturer's performance requirements when exposed to the ambient conditions beyond manufacturer's limits. If required, Contractor shall provide heaters in enclosures.

#### C. All work shall conform to the National Electrical Contractor's Association "Standard of Installation".

#### D. Door Contacts: Secure the magnet side of recessed door contacts in the door, using metal mounting brackets as required. Magnet shall not be mounted on a wood spacer block to make it flush with the top of the door.

#### E. Batteries for ACP shall be installed in dedicated separate NEMA 1 enclosure near the ACP.

### 3.3 SYSTEM WIRING

#### A. Unless noted otherwise, no wiring other than that directly associated with the system shall be permitted in conduits and pathways.

#### B. Cables to be installed in raceway, cable tray, continuous cable support system or J-hooks the entire length of each cable. In all locations where devices are installed in inaccessible ceilings or concealed in walls (i.e. door contacts), utilize signal cable in raceway from the device to the area above the accessible grid ceiling.

#### C. Unless otherwise noted in the Contract Documents, install a dedicated cable to each individual field device.

- D. Install 1-foot cable service loop for all security system cable at the last J-hook nearest the raceway down to the device, or as near as possible to the device when J-hooks are not installed.
- E. Wiring splices are to be avoided to the extent possible, and if needed they must be made only in junction boxes and shall be crimp connected. Wire nut-type connections are not acceptable.

3.4 SYSTEM LABELING

- A. Per Specification Section 26 05 53.

3.5 FIELD QUALITY CONTROL

- A. Perform a 100% Device Test on each device point and circuit for proper operation. Confirm operation by observation in the client connected to the system.
  - 1. Test each set of magnetic contacts for proper operation and contact closure.
  - 2. Test each proximity card reader for authorized entry and proper operation of the associated door lock.
  - 3. Test each lockdown button for proper operation.
- B. Verify that activation of all field devices noted above will properly annunciate at the ACP (by checking the associated LED).
- C. Provide a report from the system that shows all devices tested.
- D. Demonstrate proper operation of the reports. Generate sample Historical Reports using Owner-provided printers.
- E. Confirm system operation under simulated utility power outage.
- F. Demonstrate properly restricted operator privileges by logging in as an Operator and demonstrating operation.

END OF SECTION