

INVITATION TO BID

McLaughlin Youth Center Boiler Renovation & Replacement ANC 17-27C

Bidders are invited to submit sealed bids, in single copy, to: Contractor to submit a bid to provide all labor, supervision, permits, equipment and materials to renovate 2 existing boilers, replace 1 existing boiler, and replace the circulating pump tree and various booster pumps. All work is to be done in accordance with the plans and specifications associated with this document.

A Pre-Bid walk through is scheduled for March 2nd at 9:00 a.m. at the Facility – Bidders are strongly encouraged to attend. Please meet at the back of MYC near the freight entrance. Located on Buhite drive off Piper St.

Project related questions or clarifications: Mark Moon, Project Manager at (907) 269-7812 or mark.moon@alaska.gov

Bids will be opened publicly at 2:00 pm local time March 23, 2017 at 240 Main Street-Suite 502 Juneau Alaska 99801

Bids, modifications or withdrawals transmitted by mail must be received no later than 30 minutes prior to the scheduled time of bid opening.

Mark Moon at 3601 C Street - Suite 578 Anchorage Alaska 99503 must receive hand-delivered bids, modifications or withdrawals prior to the scheduled time of bid opening.

Faxed bid modifications must be addressed to:

DHSS/FMS/Facilities - ATTN: James Woods - Fax number: (907) 465-2607

The Engineer's Estimate: less than \$600,000

The Project completion date: September 29, 2017

Plans and Specifications may be printed by the Bidder from:

- the State of Alaska website (www.state.ak.us) Public Notices Online button, click on the More Public Notices button, Browse Active Public Notice button, then Health & Social Services, and Procurement

OR

- the Bidder may forward the project website location/address information to the print shop of their choice for printing – all associated printing costs are payable by the Bidder

Bidders are responsible for checking this website for addenda. Not acknowledging addenda at the time of bid will deem the Bidder non-responsive.

Issued: February 27, 2017

McLaughlin Youth Center

Boiler Renovation & Replacement

PROJECT NO. ANC 17-27C

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McLaughlin Youth Center

Boiler Renovation & Replacement

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Boiler Renovation & Replacement

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See Hazardous Materials Assessment Construction Documents.

DRAWINGS

(Bound Separately)

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STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

INVITATION TO BID
for Construction Contract

Date _____

McLaughlin Youth Center Boiler Renovation & Replacement – ANC 17-27C

Project Name and Number

Location of Project: Anchorage, Alaska
Contracting Officer: Michael Frawley
Issuing Office: Dept. of Health & Social Services, Office of the Commissioner, Finance & Management Services
State Funded [x] Federal Aid []
Description of Work:

The Engineer's Estimate is: \$600,000.00

All work shall be completed in 180 Calendar Days, or by September 29, 2017.
Interim Completion dates, if applicable, will be shown in the Special Provisions.

Bidders are invited to submit sealed bids, in single copy, for furnishing all labor, equipment, and materials and for performing all work for the project described above. Bids will be opened publicly at 2:00 pm local time, at 240 Main Street – Suite 502 Juneau, Alaska 99801 on the 23rd of March 2017.

SUBMISSION OF BIDS

ALL BIDS INCLUDING ANY AMENDMENTS OR WITHDRAWALS MUST BE RECEIVED PRIOR TO BID OPENING. BIDS SHALL BE SUBMITTED ON THE FORMS FURNISHED AND MUST BE IN A SEALED ENVELOPE MARKED AS FOLLOWS:

Bid for Project:
ANC 17-27C
McLaughlin Youth Center
Boiler Renovation & Replacement

ATTN: James Woods
State of Alaska
Department of Health and Social Services
Finance & Management Services, Facilities Office
240 Main Street, Suite 502 Juneau, AK 99811

Bids, amendments or withdrawals transmitted by mail must be received in the above specified post office box no later than **30 minutes** prior to the scheduled time of bid opening. Hand-delivered bids, amendments or withdrawals must be received at **3601 C Street – Suite 578 Anchorage, Alaska 99503** prior to the scheduled time of bid opening. Faxed bid amendments must be addressed to **James Woods**. Fax number: **(907) 465-2607**.

A bid guaranty is required with each bid in the amount of 5% of the amount bid. (Alternate bid items as well as supplemental bid items appearing on the bid schedule shall be included as part of the total amount bid when determining the amount of bid guaranty required for the project.)

The Department hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this Invitation, Disadvantaged Business Enterprises (DBEs) will be afforded full opportunity to submit bids and will not be discriminated against on the grounds of race, color, national origin, or sex in consideration for an award.

NOTICE TO BIDDERS

Bidders are hereby notified that data to assist in preparing bids is available as follows:

Plans and Specifications may be printed by the Bidder from:

- the State of Alaska website under Public Notices On-line

OR

- the Bidder may forward the project website location/address information to the print shop of their choice for printing – all associated printing costs are payable by the Bidder

All questions relating to technical aspects of the project should be directed to the following. Bidders requesting assistance in viewing the project must make arrangements at least 48 hours in advance with:

Project manager: Mark Moon, DHSS Building Management Specialist

Fax: (907) 334-2689 _____ Phone: (907) 269-7812 _____ Email: mark.moon@alaska.gov

All questions concerning bidding procedures should be directed to:

ATTN: James Woods

State of Alaska

Department of Health and Social Services

Finance & Management Services, Facilities Office

240 Main Street, Suite 502 Juneau, AK 99811

Other Information:

Alaska Veterans Preference

To qualify for the Veterans Preference (per AS 36.30.175), the bidder must:

1. Qualify for the Alaska Bidder's Preference
2. Add value by actually performing the services or have prior experience in selling the supplies
3. Qualify as an Alaska Veteran & Complete/sign Alaska Veterans Affidavit (06D-17, dated 4/12)
4. The value of the preference cannot exceed \$5,000.

**STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES**

INFORMATION TO BIDDERS

The Department is concerned over the manner in which bids are submitted. Bidders are requested to study and follow the bid assembly instructions as to the method and form for submitting bids so there will be no reason to reject a bid.

EXAMINATION OF CONTRACT REQUIREMENTS

Bidders are expected to examine carefully the plans, specifications and all other documents incorporated in the contract to determine the requirements thereof before preparing bids.

Any explanation desired by bidders regarding the meaning or interpretation of drawings and specifications must be requested in writing and with sufficient time allowed for a reply to reach them before the submission of their bids. Oral explanations or instructions given before the award of the contract will not be binding. Any interpretation made will be in the form of an addendum to the specifications or drawings and will be furnished to all bidders and its receipt by the bidder shall be acknowledged.

CONDITIONS AT SITE OF WORK

Bidders are expected to visit the site to ascertain pertinent local conditions such as the location, accessibility and character of the site, labor conditions, the character and extent of the existing work within or adjacent thereto, and any other work being performed thereon.

PREPARATION OF BIDS

- (a) Bids shall be submitted on the forms furnished, and must be manually signed in ink. If erasures or other changes appear on the forms, each such erasure or change must be initialed by the person signing the proposal.
- (b) The bid schedule will provide for quotation of a price or prices for one or more pay items which may include unit price or lump sum items and alternative, optional or supplemental price schedules or a combination thereof which will result in a total bid amount for the proposed construction.

Where required on the bid form, bidders must quote on all items and **THEY ARE WARNED** that failure to do so will disqualify them. When quotations on all items are not required, bidders should insert the words "no bid" in the space provided for any item not requiring a quotation and for which no quotation is made.

- (c) The bidder shall specify the price or prices bid in figures. On unit price contracts the bidder shall also show the products of the respective unit prices and quantities written in figures in the column provided for the purpose and the total amount of the proposal obtained by adding the amounts of the several items. All the figures shall be in ink or typed.

- (d) Neither conditional nor alternative bids will be considered unless called for.
- (e) Unless specifically called for, telegraphic or telefacsimile bids will not be considered.
- (f) Bid Schedule form should be enclosed in a separate sealed envelope and enclosed with all other bidding forms required at the opening.

BID SECURITY

All bids shall be accompanied by a bid security in the form of an acceptable Bid Bond (Form 06D-14), or a certified check, cashier's check or money order made payable to the State of Alaska. The amount of the bid security is specified on the Invitation to Bid.

Bid Bonds must be accompanied by a legible Power of Attorney.

If the bidder fails to furnish an acceptable bid security with the bid, the bid shall be rejected as non-responsive. Telegraphic notification of execution of Bid Bond does not meet the requirement of bid security accompanying the bid. An individual surety will not be accepted as a bid security.

The bid securities of the two lowest bidders will be held by the Department until the Contract has been executed, after which such bid securities will be returned. All other bid securities will be returned as soon as practicable. If all bids are rejected, all bid securities will be returned as soon as practicable.

BIDDERS QUALIFICATIONS

Before a bid is considered for award, the bidder may be requested by the Department to submit a statement of facts, in detail, as to his previous experience in performing comparable work, his business and technical organization, financial resources, and plant available to be used in performing the contemplated work.

SUBMISSION OF BIDS

Bids must be submitted as directed on the Invitation for Bids. Do not include in the envelope any bids for other work.

ADDENDA REQUIREMENTS

The bid documents provide for acknowledgement individually of all addenda to the drawings and/or specifications on the signature page of the Proposal. All addenda shall be acknowledged on the Proposal or by telegram prior to the scheduled time of bid opening. If no addenda are received by the bidder, the word "None" should be shown as specified.

Every effort will be made by the Department to insure that Contractors receive all addenda when issued. Addenda will be issued to the individual or company to whom bidding documents were issued. Addenda may be issued by any reasonable method such as hand delivery, mail, telefacsimile, telegraph, email, internet download, courier and in special circumstances by phone. Addenda will be issued to the address, telefacsimile number or phone number as stated on the planholder's list unless picked up in person or included with the bid documents. It is the bidder's responsibility to insure that he has received all addenda affecting the Invitation for Bids. No claim or protest will be allowed based on the bidder's allegation that he did not receive all of the addenda

for an Invitation for Bids. The Department is not responsible for issuing addenda to non-registered bidders.

WITHDRAWAL OR REVISION OF BIDS

A bidder may withdraw or revise a bid after it has been deposited with the Department, provided that the request for such withdrawal or revision is received by the designated office, in writing, by telegram, or by telefacsimile, before the time set for opening of bids.

Telegraphic or telefacsimile modifications shall include both the modification of the unit bid price and the total modification of each item modified, but shall not reveal the amount of the total original or revised bids. Form 06D-16 shall be used to submit such modifications.

RECEIPT AND OPENING OF BIDS

- (a) All bids, including any amendment or withdrawal must be received by the Department prior to the scheduled time of bid opening. Any bid, amendment, or withdrawal that has not been actually received by the Department prior to the time of the scheduled bid opening will not be considered.
- (b) No responsibility will be attached to any officer or employee of the Department for the premature opening of, or failure to open, a bid improperly addressed or identified.
- (c) The Department reserves the right to waive any technicality in bids received when such waiver is in the interest of the State.

BIDDERS PRESENT

At the time fixed for bid opening, bids will be publicly opened and read for the information of bidders and others properly interested, who may be present either in person or by representative. The amount of the bid and the name of the bidder shall be compiled and distributed as soon as possible after bid opening. Bids are not open for public inspection until after the Notice of Intent to Award is issued.

BIDDERS INTERESTED IN MORE THAN ONE BID

If more than one bid is offered by any one party, by or in the name of his or their clerk or partner, 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.

REJECTION OF BIDS

The Department reserves the right to reject any and all bids when such rejection is in the best interest of the State; to reject the bid of a bidder who has previously failed to perform properly, or complete on time, contracts of a similar nature; to reject the bid of a bidder who is not, in the opinion of the Contracting Officer, in a position to perform the contract; and to reject a bid as non-responsive where the bidder fails to furnish the required documents, fails to complete required documents in the manner directed, or makes unauthorized alterations to the bid documents.

AWARD OF CONTRACT

- (a) The letter of award, if the contract is to be awarded, will be issued to the lowest responsible and responsive bidder as soon as practical and usually within 40 calendar days after opening of proposals.
- (b) The successful bidder will be notified of the Department's intent to award the contract and requested to execute certain documents, including the contract form and bonds.
- (c) The contract will be awarded to the successful bidder following receipt by the Department of all required documents, properly executed, within the time specified in the intent to award. Failure to enter into a contract within the specified time shall be grounds for forfeiture of the bid security and consideration of the second low bidder for award.

**STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES**

SUPPLEMENTARY INFORMATION TO BIDDERS

This document modifies or adds to the provisions of Department of Health & Social Services form 06D-3, INFORMATION TO BIDDERS.

Following subparagraph (c) under subject area "PREPARATION OF BIDS", add the following subparagraph:

"(C-1) When provided within the supplements to the bid schedule the Bidder shall specify those Alaska bidder and product preferences applicable to their bid. All entries made by the Bidder and designating applicable preferences must conform to the requirements of AS 36.30 and the instructions on the forms to warrant consideration."

Following subject area "REJECTION OF BIDS", add the following subject area:

"CONSIDERATION OF PROPOSALS

After the Proposals are opened and read, they will be compared on the basis identified on the bid schedule and the apparent low Bidder announced. The apparent low Bidder shall, within 5 working days following identification as the apparent low Bidder, submit a list of all firms with which the prime CONTRACTOR intends to execute subcontracts for the performance of the Contract. The list shall include the name, business address, Alaska business license number and contractor's registration number of each proposed Subcontractor.

Upon confirmation of the contents of the proposal the low Bidder will be identified by the DEPARTMENT by telephone and in writing. If the low Bidder differs from the apparent low Bidder then the requirements for Subcontractor listing, as noted above, shall become effective upon the low Bidder at the time of identification.

If a Bidder fails to list a Subcontractor or lists more than one Subcontractor for the same portion of Work and the value of that Work is in excess of one-half of one percent of the total bid, the Bidder agrees that it shall be considered to have agreed to perform that portion of Work without the use of a Subcontractor and to have represented that the Bidder is qualified to perform the Work.

A Bidder who attempts to circumvent the requirements of this section by listing as a Subcontractor another contractor who, in turn, sublets the majority of the Work required under the Contract, violates this section.

If a Contract is awarded to a Bidder who violates this section, the Bidder agrees that the Contracting Officer may:

- (1) cancel the Contract without any damages accruing to the State; or
- (2) after notice and a hearing, assess a penalty on the Bidder in an amount that does not exceed 10 percent of the value of the Subcontract at issue.

A Bidder may replace a listed Subcontractor who:

- (1) fails to comply with AS 08.18;
- (2) files for bankruptcy or becomes insolvent;
- (3) fails to execute a contract with the Bidder involving performance of the Work for which the Subcontractor was listed and the Bidder acted in good faith;
- (4) fails to obtain bonding;
- (5) fails to obtain insurance acceptable to the State;
- (6) fails to perform the Contract with the Bidder involving Work for which the Subcontractor was listed;
- (7) must be substituted in order for the prime CONTRACTOR to satisfy required State and Federal affirmative action requirements;
- (8) refuses to agree or abide with the bidder's labor agreement; or
- (9) is determined by the Contracting Officer to be non-responsive."

Modify subject area "AWARD OF CONTRACT" as follows:

Subparagraph (a) substitute the word "generally" for the phrase "as soon as practical and"

Subparagraph (b) delete and substitute the following:

"All Bidders will be notified of the DEPARTMENT's intent to Award the Contract and the successful Bidder will be requested to execute certain documents, including the Contract form and bonds."



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

REQUIRED DOCUMENTS

State Funded Contracts

McLaughlin Youth Center Boiler Renovation & Replacement– ANC 17-27C

REQUIRED FOR BID. Bids will not be considered if the following documents are not completely filled out and submitted at the time of bidding:

1. **Bid Form (Form 06D-9)**
 2. **Bid Schedule**
 3. **Bid Bond (Form 06D-14)**
 4. Any bid revisions must be submitted by the bidder prior to bid opening on the following form:
Bid Modification (Form 06D-16)
-

REQUIRED AFTER NOTICE OF APPARENT LOW BIDDER. The apparent low bidder is required to complete and submit the following document within 5 working days after receipt of written notification:

1. **Subcontractor List (Form 06D-5)**
-

REQUIRED FOR AWARD. In order to be awarded the contract, the successful bidder must completely fill out and submit the following documents within the time specified in the intent to award letter:

1. **Contract (Form 06D-10A)**
2. **DD Form 214 or NGB Form 22 (if claiming Alaska Veterans Preference under AS 36.30.175(d))**
3. **Payment Bond (Form 06D-12)**
4. **Performance Bond (Form 06D-13)**
5. **Contractor's Questionnaire (Form 06D-8)**
6. **Contractor's Certification of Subcontractors (Form 05)**
7. **Certificate of Insurance (from carrier)**
8. **Dept. of Labor – Notice of Work Form**



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

ALASKA VETERAN'S PREFERENCE AFFIDAVIT

In response to the Invitation to Bid for: **McLaughlin Youth Center**
Project Name and Number: **Boiler Renovation & Replacement #ANC 17-27C,**

I certify under penalty of perjury that _____
(Name) qualifies for the Alaska Veteran's Preference under the following conditions:

- (a) If a bidder qualifies under AS 36.30.170(b) as an Alaska bidder and is a qualifying entity, a five percent bid preference shall be applied to the bid price (preference may not exceed \$5,000). In this subsection, "qualifying entity" means a:
- (1) Sole proprietorship owned by an Alaska Veteran;
 - (2) Partnership under AS 32.06 or AS 32.11 if a majority of the members are Alaska Veterans;
 - (3) Limited Liability Company organized under AS 10.50 if a majority of the individuals are Alaska Veterans.
- (b) To qualify for a preference under this section, a bidder must add value by the bidder itself actually performing, controlling, managing and supervising a significant part of the services provided, or the bidder must have sold supplies of the general nature solicited to other state agencies, governments, or the general public.
- (c) In this section, "Alaska Veteran" means an individual who is a:
- (1) Resident of this state; and
 - (2) Veteran; means an individual who:
 - (A) Served in the:
 - (i) Armed Forces of the United States, including a reserve unit of the United States armed forces; or
 - (ii) Alaska Territorial Guard, the Alaska Army National Guard, the Alaska Air National Guard, or the Alaska Naval Militia; and
 - (B) Was separated from the service under a condition that was not dishonorable.

Authorized Signature

Printed Name

Date



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

BID FORM

for
McLaughlin Youth Center Boiler Renovation & Replacement– ANC 17-27C

Project Name and Number

By

Company Name

Company Address (Street or PO Box, City, State, Zip)

**To the CONTRACTING OFFICER,
DEPARTMENT OF HEALTH & SOCIAL SERVICES**

In compliance with your Invitation for Bids dated _____, the Undersigned proposes to furnish and deliver all the materials and do all the work and labor required in the construction of the above-referenced Project, located at or near _____, **Alaska**, according to the plans and specifications and for the amount and prices named herein as indicated on the Bid Schedule consisting of _____ sheet(s), which is made a part of this Bid.

The Undersigned declares that he has carefully examined the contract requirements and that he has made a personal examination of the site of the work; that he understands that the quantities, where such are specified in the Bid Schedule or on the plans for this project, are approximate only and subject to increase or decrease, and that he is willing to perform increased or decreased quantities of work at unit prices bid under the conditions set forth in the Contract Documents.

The Undersigned hereby agrees to execute the said contract and bonds within fifteen calendar days, or such further time as may be allowed in writing by the Contracting Officer, after receiving notification of the acceptance of this bid, and it is hereby mutually understood and agreed that in case the Undersigned does not, the accompanying bid guarantee shall be forfeited to the State of Alaska, Department of Health & Social Services as liquidated damages, and the said Contracting Officer may proceed to award the contract to others.

The Undersigned agrees to commence the work within 10 calendar days and to complete the work by September 29, 2017, unless extended in writing by the Contracting Officer.

The Undersigned proposes to furnish Payment Bond in the amount of **50%** and Performance Bond in the amount of **50%** (of the contract), as surety conditioned for the full, complete and faithful performance of this contract.

The Undersigned acknowledges receipt of the following addenda to the drawings and/or specifications (give number and date of each).

Addenda Number	Date Issued

Addenda Number	Date Issued

Addenda Number	Date Issued

NON-COLLUSION AFFIDAVIT

The Undersigned declares, under penalty of perjury under the laws of the United States, that neither he, nor the firm, association, or corporation of which he is a member, has, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with this bid.

The Undersigned has read the foregoing proposal and hereby agrees to the conditions stated therein by affixing his signature below:

Signature of Authorized Company Representative

Typed or Printed Name and Title

Phone Number

Fax Number

Email Address

INSTRUCTIONS FOR ALASKA PRODUCTS PREFERENCE WORKSHEET

Special Note:

All procurements, except those funded from Federal sources, shall contain Contract provisions for the preference of Alaska products. The products listed by the Bidder on this worksheet have been selected for the referenced project from the "Alaska Product Preference List" which was in force 30 days prior to the advertisement date of this contract. Bidders may obtain a copy of the appropriate listing "Alaska Preference List" by contacting their local DCED office or by writing: Dept. of Commerce & Economic Development, Alaska Products Preference Listing, P.O. Box D, Juneau, AK 99811.

BIDDERS INSTRUCTIONS:

A. General. The Contracting Agency may request documentation to support entries made on this form. False presentations may be subject to AS 36.30.687. All Bidder's entries must conform to the requirements covering bid preparations in general. Discrepancies in price extensions shall be resolved by multiplying the declared total value times the preference percentage and adjusting any resulting computation accordingly.

B. Form Completion - BASIC BIDS.

(1) Enter project number and name, the words "Basic Bid" and the CONTRACTOR'S name in the heading of each page as provided.

(2) The Bidder shall compare those candidate products appearing on the preference listing (see Special Notice comments above) against the requirements of the technical specifications appearing in the contract documents. If the Bidder determines that a candidate product can suitably meet the contract requirements, then that product may be included in the worksheet as follows.

(3) For each suitable product submitted under the "Basic Bid" enter:

- ! the product name, generic description and its corresponding technical specification section number under the heading "PRODUCT",
- ! the company name of the Alaska producer under the heading "MANUFACTURER", and,
- ! the product class (I, II, or III) and preference percentage (3, 5, or 7%, respectively) under the "CLASS/%" heading.

(4) For each product appearing on the list and to be utilized by the CONTRACTOR enter:

- ! under the heading "TOTAL DECLARED VALUE" the manufacturer's quoted price of the product, (caution: this value is to be the manufacturer's quoted price at the place of origin and shall not include costs for freight, handling or miscellaneous charges of incorporating the product into the Work), and
- ! the resulting preference--ie.: the preference percentage times the total declared value amount -- under the heading "REDUCTION AMOUNT".

(5) Continue for all "suitable" basic bid products. If the listing exceeds one page enter the words "Page #__SUB" in front of the word "TOTAL" and on the first entry line of the following page enter "SUBTOTAL OF REDUCTION AMOUNT FROM PREVIOUS PAGE".

(6) On the final page of the listing enter "BASIC BID PREFERENCE GRAND" immediately before the word "TOTAL".

(7) Total the entries in the "REDUCTION AMOUNT" column for each page by commencing at the first entry for that page. If a continuation page exists, ensure that the subtotal from the previous page is computed into the running total. Number pages as appropriate.

(8) Compute a Grand Total for the Basic Bid Preference. Enter this amount on the final page of the worksheet and at line or column "C" on the Bid Schedule or Bid Schedule Summary Sheet as appropriate. Submit worksheet(s) with Bid Schedule Summary Sheet.

C. Forms Completion - ALTERNATE BIDS.

(1) Enter project number and name, the words "ALTERNATE BID #_____", and CONTRACTOR'S name in the heading of each page as provided.

(2) On the first entry line enter "ADDITIONAL ALASKA PRODUCTS FOR ALTERNATE BID

#_____", and repeat procedures 2 through 5 under part B of these Bidder's instructions except that references to "Basic Bid" shall be replaced with the words "Alternate Bid #_____".

(3) Following the listing of all additional Alaska products enter the words "ADDITIONAL PRODUCTS PREFERENCE FOR ALTERNATE BID #_____-SUBTOTAL" and enter a subtotal amount for all additional products as listed. Subtotal amount to be determined by adding all additional product entries in the "REDUCTION AMOUNT" column.

(4) Skip three lines and enter "LESS THE FOLLOWING NON-APPLICABLE ALASKA PRODUCTS".

(5) Beginning on the next line enter the product name and manufacturer of each Alaska Product appearing on the "Basic Bid" listing which would be deleted or reduced from the Project should the "Alternate Bid" be selected. Details of entry need only be sufficient to clearly reference the subject product. (ie. "Prehung Doors by Alaska Door Co. in lieu of "Prehung Solid Core Wood Door, model "Super Door", Section 08210, by Alaska Door Co., Anchorage.) Products being reduced shall specify the amount of the reduction. Should no products require deletion enter "None". When a product is listed as a "NON-APPLICABLE ALASKA PRODUCT" for this alternate bid and if under the basic bid the Bidder received a preference on his basic bid as a result of that product, then the applicable entries under the headings "TOTAL DECLARED VALUE" and "REDUCTION AMOUNT" (for each product and from the basic bid listing) shall also be entered into the corresponding headings of this form. Where only a portion of the product has been deleted, the entry (which will differ from those on the basic bid listing) may be "pro-rated" or as otherwise substantiated.

(6) Following the listing of all non-applicable Alaska products enter the words "NON-APPLICABLE PRODUCTS PREFERENCE FORM BASIC BID --SUBTOTAL" and enter a subtotal amount for all non-applicable products as listed. Subtotal amount to be determined by adding all non-applicable entries in the "REDUCTION AMOUNT" column.

(7) At the bottom of the final page enter the words "ALTERNATE BID #____PREFERENCE GRAND" immediately before the word "TOTAL".

(8) Compute a Grand Total for the Alternate Bid Preference (for Alternate #_____) by subtracting the non-applicable product preference subtotal from the additional product preference subtotal. Enter on the final page as provided and at the corresponding line in column "C" on the Bid Schedule Summary Sheet. Submit worksheet(s) with the Bid Schedule Summary Sheet.

(9) A separate listing for each alternate bid is required.

BID SCHEDULE

Project: **McLaughlin Youth Center Boiler Renovation & Replacement– ANC 17-27C**

Bidders Please Note: Before preparing this bid schedule, read carefully, "Information to Bidders", "Supplementary Information to Bidders", and the following:

The Bidder shall insert a fixed price in figures opposite each pay item that appears in the bid schedule to furnish all labor, material, equipment, supervision, and provide all work for each item listed. No price is to be entered or tendered for any item not appearing in the bid schedule. Conditioned or qualified bids will be considered non-responsive.

PAY ITEM	DESCRIPTION OF PAY ITEM	TOTAL BID PRICE, IN FIGURES
----------	-------------------------	-----------------------------

1. BASIC BID All work described in the Specifications and Construction Documents for the Project # **ANC 17-27C**

- | | | |
|----|--|----------|
| a. | Lump Sum Total Basic Bid | \$ _____ |
| b. | Alaska Bidder's Preference - (5% of Basic Bid) | \$ _____ |
| c. | Alaska Veterans Preference - 5% of Basic Bid
(May not exceed \$5,000) | \$ _____ |
| d. | Alaska Products Preference - (Attach worksheet(s)) | \$ _____ |
| e. | Adjusted Basic Bid: (a – b – c – d) | \$ _____ |

Contractor's Name (Printed)

Alaska Contractor's Registration #

Expires

Alaska Business License #

Expires



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

BID BOND

For

McLaughlin Youth Center Boiler Renovation & Replacement ANC 17-27C

Project Name and Number

DATE BOND EXECUTED: _____

PRINCIPAL (Legal name and business address):

TYPE OF ORGANIZATION:

	<input type="checkbox"/> Individual	<input type="checkbox"/> Partnership
	<input type="checkbox"/> Joint Venture	<input type="checkbox"/> Corporation
STATE OF INCORPORATION:		

SURETY(IES) (Name and business address):

A.	B.	C.
PENAL SUM OF BOND:		DATE OF BID:

We, the PRINCIPAL and SURETY above named, are held and firmly bound to the State (State of Alaska), in the penal sum of the amount stated above, for the payment of which sum will be made, we bind ourselves and our legal representatives and successors, jointly and severally, by this instrument.

THE CONDITION OF THE FOREGOING OBLIGATION is that the Principal has submitted the accompanying bid in writing, date as shown above, on above-referenced Project in accordance with contract documents filed in the office of the Contracting Officer, and under the Invitation for Bids therefore, and is required to furnish a bond in the amount stated above.

If the Principal's bid is accepted and he is offered the proposed contract for award, and if the Principal fails to enter into the contract, then the obligation to the State created by this bond shall be in full force and effect.

If the Principal enters into the contract, then the foregoing obligation is null and void.

PRINCIPAL

Signature(s)	1.	2.	3.
Name(s) & Title(s) (Typed)	1.	2.	3.
See Instructions on Reverse			
Corporate Seal			

CORPORATE SURETY(IES)

Surety A	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

Surety B	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

Surety C	Name of Corporation	State of Incorporation	Liability Limit \$
Signature(s)	1.	2.	Corporate Seal
Name(s) & Titles (Typed)	1.	2.	

INSTRUCTIONS

1. This form shall be used whenever a bid bond is submitted.
2. Insert the full legal name and business address of the Principal in the space designated. If the Principal is a partnership or joint venture, the names of all principal parties must be included (e.g., "Smith Construction, Inc. and Jones Contracting, Inc. DBA Smith/Jones Builders, a joint venture"). If the Principal is a corporation, the name of the state in which incorporated shall be inserted in the space provided.
3. Insert the full legal name and business address of the Surety in the space designated. The Surety on the bond may be any corporation or partnership authorized to do business in Alaska as an insurer under AS 21.09. Individual sureties will not be accepted.
4. The penal amount of the bond may be shown either as an amount (in words and figures) or as a percent of the contract bid price (a not-to-exceed amount may be included).
5. The scheduled bid opening date shall be entered in the space marked Date of Bid.
6. The bond shall be executed by authorized representatives of the Principal and Surety. Corporations executing the bond shall also affix their corporate seal.
7. Any person signing in a representative capacity (e.g., an attorney-in-fact) must furnish evidence of authority if that representative is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved.
8. The states of incorporation and the limits of liability of each surety shall be indicated in the spaces provided.
9. The date that bond is executed must not be later than the bid opening date.



STATE OF ALASKA
DEPARTMENT OF HEALTH AND SOCIAL SERVICES

BID MODIFICATION

McLaughlin Youth Center Boiler Renovation & Replacement– ANC 17-27C

Project Name and Number

Modification Number: _____

Note: All revisions shall be made to the unadjusted bid amount(s).

Changes to the adjusted bid amounts will be computed by the Department.

PAY ITEM NO.	PAY ITEM DESCRIPTION	REVISION TO UNIT BID PRICE +/-	REVISION TO BID AMOUNT +/-
		N/A	

TOTAL REVISION: \$ _____

Name of Bidding Firm

Responsible Party Signature

Date

This form may be duplicated if additional pages are needed.



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

SUBCONTRACTOR LIST

McLaughlin Youth Center Boiler Renovation & Replacement– ANC 17-27C

Project Name and Number

The apparent low bidder shall complete this form and submit it so as to be received by the Contracting Officer prior to the close of business on the fifth working day after receipt of written notice from the Department.

Failure to submit this form with all required information by the due date will result in the bidder being declared non-responsive and may result in the forfeiture of the Bid Security.

Scope of work must be clearly defined. If an item of work is to be performed by more than one firm, indicate the portion or percent of work to be done by each.

Check as applicable: ☐ All work on the below-referenced project will be accomplished without subcontracts greater than ½ of 1% of the contract amount.

OR

☐ Subcontractor List is as follows:

FIRM NAME, ADDRESS, & PHONE No.	AK BUSINESS LICENSE No. & CONTRACTOR'S REGISTRATION No.	SCOPE OF WORK TO BE PERFORMED

CONTINUE SUBCONTRACTOR INFORMATION ON REVERSE

I hereby certify the listed Alaska Business licenses and Contractor's registrations were valid at the time bids were opened for this project.

Signature of Authorized Company Representative

Title

Company Name

Company Address (Street or PO Box, City, State, Zip)

Date

Phone Number

FIRM NAME, ADDRESS, & PHONE No.	AK BUSINESS LICENSE No. & CONTRACTOR'S REGISTRATION No.	SCOPE OF WORK TO BE PERFORMED



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

CONSTRUCTION CONTRACT

McLaughlin Youth Center Boiler Renovation & Replacement– ANC 17-27C

Project Name and Number

This CONTRACT, between the STATE OF ALASKA, DEPARTMENT OF HEALTH & SOCIAL SERVICES, herein called the Department, acting by and through its Contracting Officer, and

Company Name

Company Address (Street or PO Box, City, State, Zip)

a/an ☐ Individual ☐ Partnership ☐ Joint Venture ☐ Sole Proprietorship ☐ Corporation incorporated under the laws of the State of _____, its successors and assigns, herein called the Contractor, is effective the date of the signature of the Contracting Officer on this document.

WITNESSETH: That the Contractor, for and in consideration of the payment or payments herein specified and agreed to by the Department, hereby covenants and agrees to furnish and deliver all the materials and to do and perform all the work and labor required in the construction of the above-referenced project at the prices bid by the Contractor for the respective estimated quantities aggregating approximately the sum of

_____ Dollars
(\$ _____), and such other items as are mentioned in the original Bid, which Bid and prices named, together with the Contract Documents are made a part of this Contract and accepted as such.

It is distinctly understood and agreed that no claim for additional work or materials, done or furnished by the Contractor and not specifically herein provided for, will be allowed by the Department, nor shall the Contractor do any work or furnish any material not covered by this Contract, unless such work is ordered in writing by the Department. In no event shall the Department be liable for any materials furnished or used, or for any work or labor done, unless the materials, work, or labor are required by the Contract or on written order furnished by the Department. Any such work or materials which may be done or furnished by the Contractor without written order first being given shall be at the Contractor's own risk, cost, and expense and the Contractor hereby covenants and agrees to make no claim for compensation for work or materials done or furnished without such written order.

The Contractor further covenants and agrees that all materials shall be furnished and delivered and all labor shall be done and performed, in every respect, to the satisfaction of the Department, on or before: September 29, 2017. It is expressly understood and agreed that in case of the failure on the part of the Contractor, for any reason, except with the written consent of the Department, to complete the furnishing and delivery of materials and the doing and performance of the work before the aforesaid date, the Department shall have the right to deduct from any money due or which may become due the Contractor, or if no money shall be due, the Department shall have the right to recover

Three Hundred Twenty Five dollars (\$325.00) per day for each calendar day elapsing between the time stipulated for the completion and the actual date of completion in accordance with the terms hereof; such deduction to be made, or sum to be recovered, not as a penalty but as liquidated damages.

The bonds given by the Contractor in the sum of \$_____ Payment Bond, and \$_____ Performance Bond, to secure the proper compliance with the terms and provisions of this Contract, are submitted herewith and made a part hereof.

IN WITNESS WHEREOF, the parties hereto have executed this Contract and hereby agree to its terms and conditions.

CONTRACTOR

Company Name

Signature of Authorized Company Representative

Typed or Printed Name and Title

Date

(Corporate Seal)

**STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES**

Signature of Contracting Officer

Typed or Printed Name

Date



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

PERFORMANCE BOND

Bond No. _____

For

McLaughlin Youth Center Boiler Renovation & Replacement– ANC 17-27C

Project Name and Number

KNOW ALL WHO SHALL SEE THESE PRESENTS:

That _____
of _____ as Principal,
and _____
of _____ as Surety,
firmly bound and held unto the State of Alaska in the penal sum of _____ Dollars

(\$ _____) good and lawful money of the United States of America for the payment whereof,
well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the _____ of _____
A.D., 20____, for construction of the above-named project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall well and truly perform and
complete all obligations and work under said contract and if the Principal shall reimburse upon demand of the Department of
Transportation and Public Facilities any sums paid him which exceed the final payment determined to be due upon completion of the
project, then these presents shall become null and void; otherwise they shall remain in full force and effect.

IN WITNESS WHEREOF, we have hereunto set our hands and seals at _____,
_____ this _____ day of _____ A.D., 20____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

Alaska Department of Health & Social Services Authorized Representative

Date

INSTRUCTIONS

1. This form shall be used whenever a performance bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
5. The bond shall be signed by authorized persons. Where such person is signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

PAYMENT BOND

Bond No. _____

For

McLaughlin Youth Center Boiler Renovation & Replacement– ANC 17-27C

Project Name and Number

KNOW ALL WHO SHALL SEE THESE PRESENTS:

That _____
of _____ as Principal,
and _____
of _____ as Surety,
firmly bound and held unto the State of Alaska in the penal sum of _____ Dollars

(\$ _____) good and lawful money of the United States of America for the payment whereof,
well and truly to be paid to the State of Alaska, we bind ourselves, our heirs, successors, executors, administrators, and assigns,
jointly and severally, firmly by these presents.

WHEREAS, the said Principal has entered into a written contract with said State of Alaska, on the _____ of _____
A.D., 20____, for construction of the above-referenced project, said work to be done according to the terms of said contract.

Now, THEREFORE, the conditions of the foregoing obligation are such that if the said Principal shall comply with all requirements
of law and pay, as they become due, all just claims for labor performed and materials and supplies furnished upon or for the work
under said contract, whether said labor be performed and said materials and supplies be furnished under the original contract, any
subcontract, or any and all duly authorized modifications thereto, then these presents shall become null and void; otherwise they
shall remain in full force and effect.

IN WITNESS WHEREOF, we have hereunto set our hands and seals at _____,
_____ this _____ day of _____ A.D., 20____.

Principal: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

Surety: _____

Address: _____

By: _____

Contact Name: _____

Phone: () _____

The offered bond has been checked for adequacy under the applicable statutes and regulations:

Alaska Department of Health & Social Services Authorized Representative

Date

INSTRUCTIONS

1. This form, for the protection of persons supplying labor and material, shall be used whenever a payment bond is required. There shall be no deviation from this form without approval from the Contracting Officer.
2. The full legal name, business address, phone number, and point of contact of the Principal and Surety shall be typed on the face of the form. Where more than a single surety is involved, a separate form shall be executed for each surety.
3. The penal amount of the bond, or in the case of more than one surety the amount of obligation, shall be typed in words and in figures.
4. Where individual sureties are involved, a completed Affidavit of Individual Surety shall accompany the bond. Such forms are available upon request from the Contracting Officer.
5. The bond shall be signed by authorized persons. Where such persons are signing in a representative capacity (e.g., an attorney-in-fact), but is not a member of the firm, partnership, or joint venture, or an officer of the corporation involved, evidence of authority must be furnished.



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

CONTRACTOR’S QUESTIONNAIRE

McLaughlin Youth Center Boiler Renovation & Replacement– ANC 17-27C

Project Name and Number

A. FINANCIAL

1. Have you ever failed to complete a contract due to insufficient resources?
[] No [] Yes If YES, explain:

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

B. EQUIPMENT

1. Describe below the equipment you have available and intend to use for this project.

ITEM	QUAN.	MAKE	MODEL	SIZE/ CAPACITY	PRESENT MARKET VALUE

2. What percent of the total value of this contract do you intend to subcontract? _____ %

3. Do you propose to purchase any equipment for use on this project?
[] No [] Yes If YES, describe type, quantity, and approximate cost:

4. Do you propose to rent any equipment for this work?
[] No [] Yes If YES, describe type and quantity:

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

C. EXPERIENCE

1. Have you had previous construction contracts or subcontracts with the State of Alaska?
[] Yes [] No

Describe the most recent or current contract, its completion date, and scope of work:

2. List, as an attachment to this questionnaire, other construction projects you have completed, the dates of completion, scope of work, and total contract amount for each project completed in the past 12 months.

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

Name of Contractor

Name and Title of Person Signing

Signature

Date



STATE OF ALASKA
DEPARTMENT OF TRANSPORTATION AND PUBLIC FACILITIES
Civil Rights Office – DBE Program

BIDDER REGISTRATION

All firms must register annually or prior to project award with the Alaska Department of Transportation and Public Facilities (DOT&PF) Civil Rights Officer (CRO). Complete this form for each contractor and subcontractor. Firms will be listed on the bidder registration online directory <http://www.dot.state.ak.us/cvlrts/bidreg.shtml>.

Name of Firm: _____

Street Address: _____

Mailing Address: _____

Contact Name: _____

Telephone Number: _____

Fax number: _____

E-mail Address: _____

Date Firm was Established: _____

The firm listed above is a (check all that apply):

- | | | |
|--------------------|--------------------------|---|
| Prime Contractor? | <input type="checkbox"/> | |
| Subcontractor? | <input type="checkbox"/> | Identify specialty: |
| Service Provider? | <input type="checkbox"/> | Identify service: |
| Material Supplier? | <input type="checkbox"/> | Identify material: |
| Manufacturer? | <input type="checkbox"/> | Identify product: |
| Certified DBE? * | <input type="checkbox"/> | *DBE- Disadvantaged Business Enterprise |

Firm's gross annual receipts:

- ☐ < \$500,000
- ☐ \$500,000- \$999,999
- ☐ \$1,000,000- \$4,999,999
- ☐ \$5,000,000- \$9,999,999
- ☐ \$10,000,000- \$16,999,999
- ☐ > \$17,000,000

Type of contracts/proposals bid by the firm (check all that apply):

- ☐ Highways ☐ Airports ☐ Transit ☐ AMHS

Signature of Company Representative

Title

Date

Send this completed form to:
ADOT&PF Civil Rights Office
PO Box 196900
Anchorage, Alaska 99519-6900

OR You may fax your completed form to:
(907) 269-0847

If you have any questions, please call **(907) 269-0851**.

**STATE OF ALASKA
DEPARTMENT OF HEALTH AND SOCIAL SERVICES
DOCUMENT 00700 - ISSUED JULY 1985**

**GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT FOR
BUILDINGS**

- ARTICLE 1 - DEFINITIONS**
- ARTICLE 2 - AUTHORITIES AND LIMITATIONS**
- 2.1 Authorities and Limitations
- 2.2 Evaluations by Contracting Officer
- 2.3 Means and Methods
- 2.4 Visits to Site
- ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE**
- 3.1 Incomplete Contract Documents
- 3.2 Copies of Contract Documents
- 3.3 Scope of Work
- 3.4 Intent of Contract Documents
- 3.5 Discrepancy in Contract Documents
- 3.6 Clarifications and Interpretations
- 3.7 Reuse of Documents
- ARTICLE 4 - LANDS AND PHYSICAL CONDITIONS**
- 4.1 Availability of Lands
- 4.2 Visit to Site/Place of Business
- 4.3 Explorations and Reports
- 4.4 Utilities
- 4.5 Damaged Utilities
- 4.6 Utilities Not Shown or Indicated
- 4.7 Survey Control
- ARTICLE 5 - BONDS AND INSURANCE**
- 5.1 Delivery of Bonds
- 5.2 Bonds
- 5.3 Replacement of Bond and Surety
- 5.4 Insurance Requirements
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- ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES**
- 6.1 Supervision of Work
- 6.2 Superintendence by CONTRACTOR
- 6.3 Character of Workers
- 6.4 CONTRACTOR to Furnish
- 6.5 Materials and Equipment
- 6.6 Anticipated Schedules
- 6.7 Finalizing Schedules
- 6.8 Adjusting Schedules
- 6.9 Substitutes or "Or-Equal" Items
- 6.10 Substitute Means and Methods
- 6.11 Evaluation of Substitution
- 6.12 Dividing the Work
- 6.13 Subcontractors
- 6.14 Use of Premises
- 6.15 Structural Loading
- 6.16 Record Documents
- 6.17 Safety and Protection

6.18	Safety Representative
6.19	Emergencies
6.20	Shop Drawings and Samples
6.21	Shop Drawing and Sample Review
6.22	Maintenance During Construction
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6.25	Use of Explosives
6.26	CONTRACTOR's Records
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7.1	Laws to be Observed
7.2	Permits, Licenses, and Taxes
7.3	Patented Devices, Materials and Processes
7.4	Compliance of Specifications and Drawings
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7.6	Sanitary Provisions
7.7	Business Registration
7.8	Professional Registration and Certification
7.9	Local Building Codes
7.10	Air Quality Control
7.11	Archaeological or Paleontological Discoveries
7.12	Applicable Alaska Preferences
7.13	Preferential Employment
7.14	Wages and Hours of Labor
7.15	Overtime Work Hours and Compensation
7.16	Covenant Against Contingent Fees
7.17	Officials Not to Benefit
7.18	Personal Liability of Public Officials
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8.1	Related Work at Site
8.2	Access, Cutting, and Patching
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ARTICLE 9 -	CHANGES
9.1	DEPARTMENT's Right to Change
9.2	Authorization of Changes within the General Scope
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10.1	Contract Price
10.2	Claim for Price Change
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10.6	CONTRACTOR's Fee
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10.9	Unit Price Work
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10.11 Disadvantaged and Women Business Enterprises (DBE and WBE) Program

ARTICLE 11- CONTRACT TIME, COMPUTATION AND CHANGE

- 11.1 Commencement of Contract Time; Notice to Proceed
- 11.2 Starting the Work
- 11.3 Computation of Contract Time
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- 11.5 Extension Due to Delays
- 11.6 Essence of Contract
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- 12.1 Warranty and Guaranty
- 12.2 Access to Work
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- 12.4 Uncovering Work
- 12.5 DEPARTMENT May Stop the Work
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- 13.1 Schedule of Values
- 13.2 Preliminary Payments
- 13.3 Application for Progress Payment
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- 13.5 Stored Materials and Equipment
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- 13.7 Withholding of Payments
- 13.8 Retainage
- 13.9 Request for Release of funds
- 13.10 Substantial Completion
- 13.11 Access Following Substantial Completion
- 13.12 Final Inspection
- 13.13 Final Completion and Application for Payment
- 13.14 Final Payment
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- 13.16 CONTRACTOR's Continuing Obligation
- 13.17 Waiver of Claims by CONTRACTOR
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ARTICLE 14- SUSPENSION OF WORK AND TERMINATION

- 14.1 DEPARTMENT May Suspend Work
- 14.2 Default of Contract
- 14.3 Rights or Remedies
- 14.4 Convenience Termination

ARTICLE 15- CLAIMS AND DISPUTES

- 15.1 Notification
- 15.2 Presenting Claim
- 15.3 Claim Validity, Additional Information & Project Manager's Action
- 15.4 Contracting Officer's Decision

ACKNOWLEDGMENT

"The State of Alaska, General Conditions of the Construction Contract for Buildings " is based on the "Standard General Conditions of the Construction Contract" as published by the National Society of Professional Engineers (document number 1910-8, 1983 edition) on behalf of the Engineers Joint Construction Documents Committee. Portions of the NSPE General Conditions are reprinted herein by the express permission of NSPE. Modifications to the NSPE text are made to provide for State laws, regulations, and established procedures.

The granting of permission by NSPE to allow the State of Alaska to preprint portions of the NSPE document 1910-8, 1983 edition does not constitute approval of the State of Alaska General Conditions of the Construction Contract for Buildings.

ARTICLE 1 - DEFINITIONS

Wherever used in the Contract Documents the following terms, or pronouns in place of them, are used, the intent and meaning, unless a different intent or meaning is clearly indicated, shall be interpreted as set forth below.

The titles and headings of the articles, sections, and subsections herein are intended for convenience of reference and shall not be considered as having bearing on their interpretation.

Whenever used in the Specifications or other Contract Documents the following terms have the meaning indicated which are applicable to both the singular and plural thereof. Working titles which have a masculine gender, are intended to refer to persons of either sex.

Terms not defined below shall have their ordinary accepted meanings within the context which they are used. Words which have a well-known technical or trade meaning when used to describe work, materials or equipment shall be interpreted in accordance with such meaning. Words defined in Article 1 are capitalized throughout these General Conditions.

Addenda - All clarifications, corrections, or changes issued graphically or in writing by the DEPARTMENT after the Advertisement but prior to the opening of Proposals.

Advertisement - The public announcement, as required by law, inviting bids for Work to be performed or materials to be furnished.

Application for Payment - The form provided by the DEPARTMENT which is to be used by the CONTRACTOR in requesting progress or final payments and which is to include such supporting documentation as is required by the Contract Documents.

Approved or Approval - Means written approval by the Contracting Officer or his authorized representative as defined in Article 2.1.

A.S - Initials which stand for Alaska Statute.

Award - The acceptance, by the DEPARTMENT, of the successful bid.

Bid Bond - A type of Proposal Guaranty.

Bidder - Any individual, firm, corporation or any acceptable combination thereof, or joint venture submitting a bid for the advertised Work.

Calendar Day - Every day shown on the calendar, beginning and ending at midnight.

Change Order - A written order by the DEPARTMENT directing changes to the Contract Documents, within their general scope.

Conditions of the Contract - Those portions of the Contract Documents which define the rights and responsibilities of the contracting parties and of others involved in the Work. The Conditions of the Contract include General Conditions, Supplementary Conditions and other conditions.

Consultant - The person, firm, or corporation retained directly by the DEPARTMENT to prepare Contract Documents, perform construction administration services, or other Project related services.

Contingent Sum Work Item - When the bid schedule contains a Contingent Sum Work Item, the Work covered shall be performed only upon the written Directive of the Project Manager. Payment shall be made as provided in the Directive.

Contract - The written agreement between the DEPARTMENT and the CONTRACTOR setting forth the obligations of the parties and covering the Work to be performed, all as required by the Contract Documents.

Contract Documents - The Contract form, Addenda, the bidding requirements and CONTRACTOR's bid (including all appropriate bid tender forms), the bonds, the Conditions of the Contract and all other Contract requirements, the Specifications, and the Drawings furnished by the DEPARTMENT to the CONTRACTOR, together with all Change Orders and documents approved by the Contracting Officer, for inclusion, modifications and supplements issued on or after the Effective Date of the Contract.

Contracting Officer - The person authorized by the Commissioner to enter into and administer the Contract on behalf of the DEPARTMENT. He has authority to make findings, determinations and decisions with respect to the Contract and, when necessary, to modify or terminate the Contract. The Contracting Officer is identified on the construction Contract.

CONTRACTOR - The individual, firm, corporation or any acceptable combination thereof, contracting with the DEPARTMENT for performance of the Work.

Contract Price - The total moneys payable by the DEPARTMENT to the CONTRACTOR under the terms of the Contract Documents.

Contract Time - The number of Calendar Days or the date specified in the construction Contract and authorized time extensions which identify how much time the CONTRACTOR is allowed to achieve Final Completion.

Controlling Item - Any feature of the Work considered at the time by the Contracting Officer as essential to the orderly completion of the Work and which, if delayed, will delay the time of Final Completion of the Contract (such as an item of Work on the critical path of a network schedule).

Defective - An adjective which refers to Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or Approval referred to in the Contract Documents, or has been damaged prior to the DEPARTMENT's Approval.

DEPARTMENT - The Alaska Department of Health and Social Services. References to "Owner", "State", "Contracting Agency", mean the DEPARTMENT.

Directive - A written communication to the CONTRACTOR from the Contracting Officer interpreting or enforcing a Contract requirement or ordering commencement of an item of Work.

Drawings - The Drawings which show the character and scope of the Work to be performed and which have been furnished by the DEPARTMENT or the DEPARTMENT's Consultant and are by reference made a part of the Contract Documents.

Effective Date of the Contract - The date on which the Contract is fully executed by both CONTRACTOR and the DEPARTMENT.

Final Acceptance - The DEPARTMENT's written acceptance of the Work following Final Completion and the performance of all Contract requirements by the CONTRACTOR.

Final Completion - The Project (or specified part thereof) has progressed to the point that all required Work is complete as determined by the Contracting Officer.

General Requirements - Sections of Division 1 of the Specifications which contain administrative and procedural requirements as well as requirements for temporary facilities which apply to Specification Divisions 2 through 16.

Holidays - In the State of Alaska, Legal Holidays occur on:

1. New Years Day - January 1
2. Martin Luther King's Birthday - Third Monday in January
3. President's Day - Third Monday in February
4. Seward's Day - Last Monday in March
5. Memorial Day - Last Monday in May
6. Independence Day - July 4
7. Labor Day - First Monday in September
8. Alaska Day - October 18
9. Veteran's Day - November 11
10. Thanksgiving Day - Fourth Thursday in November
11. Christmas Day - December 25
12. Every Sunday
13. Every day designated by public proclamation by the President of the United States or the Governor of the State as a legal Holiday.

If any Holiday listed above falls on a Saturday, Saturday and the preceding Friday are both legal Holidays. If the Holiday should fall on a Sunday, except (12) above, Sunday and the following Monday are both legal Holidays. See Title 44, Alaska Statutes.

Install - Means to build into the Work, ready to be used in complete and operable condition and in compliance with Contract Documents.

Invitation for Bids - A portion of the bidding documents soliciting bids for the Work to be performed.

Notice of Intent to Award - The written notice by the DEPARTMENT to all Bidders identifying the apparent successful Bidder and establishing the DEPARTMENT's intent to execute the Contract when all conditions required for execution of the Contract are met.

Notice to Proceed - A written notice to the CONTRACTOR to begin the Work and establishing the date on which the Contract Time begins.

Payment Bond - The security furnished by the CONTRACTOR and his Surety to guarantee payment of the debts covered by the bond.

Performance Bond - The security furnished by the CONTRACTOR and his Surety to guarantee performance and completion of the Work in accordance with the Contract.

Project - The total construction, of which the Work performed under the Contract Documents is the whole or a part, where such total construction may be performed by more than one CONTRACTOR.

Project Manager - The authorized representative of the Contracting Officer who is responsible for administration of the Contract.

Proposal - The offer of a Bidder, on the prescribed forms, to perform the Work at the prices quoted.

Proposal Guaranty - The security furnished with a Proposal to guarantee that the bidder will enter into a Contract if his Proposal is accepted by the DEPARTMENT.

Regulatory Requirements - Laws, rules, regulations, ordinances, codes and/or orders.

Schedule of Values - The DEPARTMENT's document, submitted by the CONTRACTOR and reviewed by the Contracting Officer, which shall serve as the basis for computing payment and for establishing the value of separate items of Work which comprise the Contract Price.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for the CONTRACTOR to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a Supplier and submitted by the CONTRACTOR to illustrate material, equipment, fabrication, or erection for some portion of the Work.

Specifications - Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative and procedural details applicable thereto.

Subcontractor - An individual, firm, or corporation to whom the CONTRACTOR or any other Subcontractor sublets part of the Contract.

Substantial Completion - Although not fully completed, the Work (or a specified part thereof) has progressed to the point where, in the opinion of the Contracting Officer, as evidenced by the DEPARTMENT's written notice, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended. The terms "Substantially Complete" and "Substantially Completed" as applied to any Work refer to Substantial Completion thereof.

Supplemental Agreement - A written agreement between the CONTRACTOR and the DEPARTMENT covering work that is not within the general scope of the Contract.

Supplementary Conditions - The part of the Contract Documents which amends or supplements these General Conditions.

Supplier - A manufacturer, fabricator, distributor, materialman or vendor of materials or equipment.

Surety - The corporation, partnership, or individual, other than the CONTRACTOR, executing a bond furnished by the CONTRACTOR.

Unit Price Work - Work to be paid for on the basis of unit prices.

Using Agency - The entity who will occupy or use the completed Project.

Work - Work is the act of, and the result of, performing services, furnishing labor, furnishing and incorporating materials and equipment into the Project and performing other duties and obligations, all as required by the Contract Documents. Such Work, however incremental, will culminate in the entire completed Project, or the various separately identifiable parts thereof.

ARTICLE 2 - AUTHORIZATION AND LIMITATIONS

2.1 Authorities and Limitations

2.1.1 The Contracting Officer alone, shall have the power to bind the DEPARTMENT and to exercise the rights, responsibilities, authorities and functions vested in the Contracting Officer by the Contract Documents, except that the Contracting Officer shall have the right to designate in writing authorized representatives to act for him. Wherever any provision of the Contract Documents specifies an individual or organization, whether governmental or private, to perform any act on behalf of or in the interest of the DEPARTMENT that individual or organization shall be deemed to be the Contracting Officer's authorized representative under this Contract but only to the extent so specified. The Contracting Officer may, at any time during the performance of this Contract, vest in any such authorized representatives additional power and authority to act for the Contracting Officer or designate additional representatives, specifying the extent of their authority to act for the Contracting Officer; a copy of each document vesting additional authority in or removing that authority from an authorized representative or designating an additional authorized representative shall be furnished to the CONTRACTOR. The head of the Contracting Agency reserves the right to appoint a new Contracting Officer without affecting any of the CONTRACTOR's obligations to the DEPARTMENT under this Contract.

2.1.2 The CONTRACTOR shall perform the Work in accordance with any written order (including but not limited to instruction, direction, interpretation or determination) issued by an authorized representative in accordance with the authorized representative's authority to act for the Contracting Officer. The CONTRACTOR assumes all the risk and consequences of performing the Work in accordance with any order (including but not limited

to instruction, direction, interpretation or determination) of anyone not authorized to issue such order, and of any order not in writing.

- 2.1.3 Should the Contracting Officer or his authorized representative designate Consultant(s) to act for the DEPARTMENT as provided for in Paragraph 2.1.1, the performance or nonperformance of the Consultant under such authority to act, shall not give rise to any contractual obligation or duty of the Consultant to the CONTRACTOR, any Subcontractor, any Supplier, or any other organization performing any of the Work or any Surety representing them.
- 2.1.4 The term "Contracting Officer" when used in the text of these General Conditions or other Contract Documents following this section shall also mean any duly authorized representative of the Contracting Officer when authorized in accordance with Paragraph 2.1.1.

2.2 Evaluations by Contracting Officer:

- 2.2.1 The Contracting Officer will decide all questions which may arise as to:
- a. Quality and acceptability of materials furnished;
 - b. Quality and acceptability of Work performed;
 - c. Compliance with the schedule of progress;
 - d. Interpretation of Contract Documents;
 - e. Acceptable fulfillment of the Contract on the part of the CONTRACTOR.
- 2.2.2 In order to avoid cumbersome terms and confusing repetition of expressions in the Contract Documents the terms "as ordered", "as directed", "as required", "as approved" or terms of like effect or import are used, or the adjectives "reasonable", "suitable", "acceptable", "proper" or "satisfactory" or adjectives of like effect or import are used it shall be understood as if the expression were followed by the words "the Contracting Officer".
- When such terms are used to describe a requirement, direction, review or judgment of the Contracting Officer as to the Work, it is intended that such requirement, direction, review or judgment will be solely to evaluate the Work for compliance with the Contract Documents (unless there is a specific statement indicating otherwise).
- 2.2.3 The use of any such term or adjective shall not be effective to assign to the DEPARTMENT any duty of authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

2.3 Means & Methods:

The means, methods, techniques, sequences or procedures of construction, or safety precautions and the program incident thereto, and the failure to perform or furnish the Work in accordance with the Contract Documents are the sole responsibility of the CONTRACTOR.

2.4 Visits to Site/Place of Business:

The Contracting Officer will make visits to the site and approved remote storage sites at intervals appropriate to the various stages of construction to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. The Contracting Officer may, at reasonable times, inspect that part of the plant or place of business of the CONTRACTOR or Subcontractor that is related to the performance of the Contract. Such observations or the lack of such observations shall in no way relieve the CONTRACTOR from his duty to perform the Work in accordance with the Contract Documents.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.1 Incomplete Contract Documents:

The submission of a bid by the Bidder is considered a representation that the Bidder examined the Contract Documents to make certain that all sheets and pages were provided and that the Bidder is satisfied as to the conditions to be encountered in performing the Work. The DEPARTMENT expressly denies any responsibility or liability for a bid submitted on the basis of an incomplete set of Contract Documents.

3.2 Copies of Contract Documents:

The DEPARTMENT shall furnish to the CONTRACTOR up to ten copies of the Contract Documents. Additional copies will be furnished, upon request, at the cost of reproduction.

3.3 Scope of Work:

The Contract Documents comprise the entire Contract between the DEPARTMENT and the CONTRACTOR concerning the Work. The Contract Documents are complementary; what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the Regulatory Requirements of the place of the Project.

It is specifically agreed between the parties executing this Contract that it is not intended by any of the provisions of the Contract to create in the public or any member thereof a third party benefit, or to authorize anyone not a party to this Contract to maintain a suit pursuant to the terms or provisions of the Contract.

3.4 Intent of Contract Documents:

- 3.4.1 It is the intent of the Contract Documents to describe a functionally complete Project to be constructed in accordance with the Contract Documents. Any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended result will be supplied, without any adjustment in Contract Price or Contract Time, whether or not specifically called for.
- 3.4.2 Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the Regulatory Requirements of any governmental authority, whether such reference be specific or by implication, shall mean the edition stated in the Contract Documents or if not stated the latest standard specification, manual, code or Regulatory Requirements in effect at the time of Advertisement for the Project (or, on the Effective Date of the Contract if there was no Advertisement). However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the Contract Documents) shall be effective to change the duties and responsibilities of the DEPARTMENT and the CONTRACTOR, or any of their consultants, agents or employees from those set forth in the Contract Documents, nor shall it be effective to assign to the DEPARTMENT or any of the DEPARTMENT's Consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

3.5 Discrepancy in Contract Documents:

- 3.5.1 Before undertaking the Work, the CONTRACTOR shall carefully study and compare the Contract Documents and check and verify pertinent figures, and dimensions shown thereon and all applicable field measurements. Work in the area by the CONTRACTOR shall imply verification of figures, dimensions and field measurements. If, during the above study or during the performance of the Work, the CONTRACTOR finds a conflict, error, discrepancy or omission in the Contract Documents, or a discrepancy between the Contract Documents and any standard specification, manual, code, or Regulatory Requirement which affects the Work, the CONTRACTOR shall promptly report such discrepancy in writing to the Contracting Officer. The CONTRACTOR shall obtain a written interpretation or clarification from the Contracting Officer before proceeding with any Work affected thereby. Any adjustment made by the CONTRACTOR without this determination shall be at his own risk and expense. However, the CONTRACTOR shall not be liable to the DEPARTMENT for failure to report any conflict, error or discrepancy in the Contract Documents unless the CONTRACTOR had actual knowledge thereof or should reasonably have known thereof.

3.5.2 Discrepancy - Order of Precedence:

When conflicts, errors, or discrepancies within the Contract Documents exist, the order of precedence from most governing to least governing will be as follows:

- Contents of Addenda
- Supplementary Conditions
- General Conditions
- General Requirements
- Technical Specifications
- Drawings
- Recorded dimensions will govern over scaled dimensions
- Large scale details over small scale details
- Schedules over plans
- Architectural drawings over structural drawings Structural drawings over mechanical and electrical drawings

3.6 Clarifications and Interpretations:

The Contracting Officer will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents as the Contracting Officer may determine necessary, which shall be consistent with or reasonably inferable from the overall intent of the Contract Documents.

3.7 Reuse of Documents:

Neither the CONTRACTOR nor any Subcontractor, or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with the DEPARTMENT shall have or acquire any title to or ownership rights in any of the Contract Documents (or copies thereof) prepared by or for the DEPARTMENT and they shall not reuse any of the Contract Documents on extensions of the Project or any other project without written consent of the Contracting Officer.

Contract Documents prepared by the CONTRACTOR in connection with the Work shall become the property of the DEPARTMENT.

ARTICLE 4 - LANDS AND PHYSICAL CONDITIONS

4.1 Availability of Lands:

The DEPARTMENT shall furnish as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for use of the CONTRACTOR in connection with the Work. Easements for permanent structures or permanent changes in existing facilities will be obtained and paid for by the DEPARTMENT, unless otherwise provided in the Contract Documents. The CONTRACTOR shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2 Visit to Site:

The submission of a bid by the CONTRACTOR is considered a representation that the CONTRACTOR has visited and carefully examined the site and is satisfied as to the conditions to be encountered in performing the Work and as to the requirements of the Contract Documents.

4.3 Explorations and Reports:

1. Reference is made to the Supplementary Conditions for identification of those reports of explorations and tests of subsurface conditions at the site that have been utilized by the DEPARTMENT in preparation of the Contract Documents. The CONTRACTOR may for his purposes rely upon the accuracy of the factual data contained in such reports, but not upon interpretations or opinions drawn from such factual data contained therein or for the completeness or sufficiency thereof. Except as indicated in the immediately preceding sentence and in paragraphs 4.4 and 9.9, CONTRACTOR shall have full responsibility with respect to surface and subsurface conditions at the site.

2. **Hazardous Materials:**

The CONTRACTOR is to be aware under 29 CFR 1926.1101(k)(2)(ii) Construction Industry Standards, any building or facility constructed prior to 1980 may contain suspected Hazardous Materials. All known or perceived known Hazardous Materials information will be provided by the DEPARTMENT's facility staff to the CONTRACTOR upon request. Any new suspected Hazardous Materials encountered by the CONTRACTOR shall be made known to the DEPARTMENT within 3 business days of discovery. Once notified the DEPARTMENT will have an Environmental Assessment completed to verify if hazardous materials exist.

4.4 Utilities:

The horizontal and vertical locations of known underground utilities as shown or indicated by the Contract Documents are approximate and are based on information and data furnished to the DEPARTMENT by the owners of such underground utilities.

4.4.2 The CONTRACTOR shall have full responsibility for:

- a. Reviewing and checking all information and data concerning utilities.
- b. Locating all underground utilities shown or indicated in the Contract Documents which are affected by the Work.
- c. Coordination of the Work with the owners of all utilities during construction.
- d. Safety and protection of all utilities as provided in paragraph 6.17.
- e. Repair of any damage to utilities resulting from the Work in accordance with 4.4.4 and 4.5.

4.4.3 If Work is to be performed by any utility owner, the CONTRACTOR shall cooperate with such owners to facilitate the Work.

4.4.4 In the event of interruption to any utility service as a result of accidental breakage or as result of being exposed or unsupported, the CONTRACTOR shall promptly notify the utility owner and the Contracting Officer. If service is interrupted, repair work shall be continuous until the service is restored. No Work shall be undertaken around fire hydrants until provisions for continued service has been approved by the local fire authority.

4.5 Damaged Utilities:

When utilities are damaged by the CONTRACTOR, the utility owner shall have the choice of repairing the utility or having the CONTRACTOR repair the utility. In the following circumstances, the CONTRACTOR shall reimburse the utility owner for repair costs or provide at no cost to the utility owner or the DEPARTMENT, all materials, equipment and labor necessary to complete repair of the damage:

- a. When the utility is shown or indicated in the Contract Documents.
- b. When the utility has been located by the utility owner.
- c. When no locate was requested by the CONTRACTOR for utilities shown or indicated in the Contract Documents.
- d. All visible utilities.
- e. When the CONTRACTOR could have, otherwise, reasonably been expected to be aware of such utility.

4.6 Utilities Not Shown or Indicated:

If, while directly performing the Work, an underground utility is uncovered or revealed at the site which was not shown or indicated in the Contract Documents and which the CONTRACTOR could not reasonably have been

expected to be aware of, the CONTRACTOR shall, promptly after becoming aware thereof and before performing any Work affected thereby (except in an emergency as permitted by paragraph 6.19) identify the owner of such underground utility and give written notice thereof to that owner and to the Contracting Officer. The Contracting Officer will promptly review the underground utility to determine the extent to which the Contract Documents and the Work should be modified to reflect the impacts of the discovered utility. The Contract Documents will be amended or supplemented in accordance with paragraph 9.2 and to the extent necessary through the issuance of a change document by the Contracting Officer. During such time, the CONTRACTOR shall be responsible for the safety and protection of such underground utility as provided in paragraph 6.17. The CONTRACTOR may be allowed an increase in the Contract Price or an extension of the Contract Time, or both, to the extent that they are directly attributable to the existence of any underground utility that was not shown or indicated in the Contract Documents and which the CONTRACTOR could not reasonably have been expected to be aware of.

4.7 Survey Control:

The DEPARTMENT will identify sufficient horizontal and vertical control data to enable the CONTRACTOR to survey and layout the Work. All survey work shall be performed under the direct supervision of a registered land surveyor when required by paragraph 7.8. Copies of all survey notes will be provided the DEPARTMENT on a weekly basis with variations between the Contract Documents and actual field conditions identified. Survey notes are to be in a format acceptable to the DEPARTMENT.

ARTICLE 5 - BONDS, INSURANCE, AND INDEMNIFICATION

5.1 Delivery of Bonds:

When the CONTRACTOR delivers the executed Contract to the Contracting Officer, the CONTRACTOR shall also deliver to the Contracting Officer such bonds as the CONTRACTOR may be required to furnish in accordance with paragraph 5.2.

5.2 Bonds:

5.2.1 The CONTRACTOR shall furnish Performance and Payment Bonds, each in an amount as shown on the Contract as security for the faithful performance and payment of all CONTRACTOR's obligations under the Contract Documents. These bonds shall remain in effect for one year after the date of Final Acceptance and until all obligations under this Contract, except special guarantees as per 12.7, have been met. All bonds shall be furnished on forms provided by the DEPARTMENT (or copies thereof) and shall be executed by such Sureties as are authorized to do business in the State of Alaska. The Contracting Officer may at his option copy the Surety with notice of any potential default or liability.

5.2.2 At the option of the CONTRACTOR, bonds may be provided by individual Surety the adequacy of which shall be determined by the Contracting Officer. Any costs incurred by the CONTRACTOR or individual Surety shall be borne by the CONTRACTOR. Where individual Sureties are used, two individual Sureties must each provide the State of Alaska with security equal to the amount of each bond by one, or a combination of, the following methods:

- a. Escrow account in the name of the DEPARTMENT for the duration of the Contract. Acceptable securities would include, but not necessarily be limited to: Cash; treasury notes; bearer instruments having a specific value, or; money market certificates.
- b. First *Deed of Trust* with the DEPARTMENT designated as beneficiary, against the unencumbered value of the real property located within the State of Alaska or an agreement by any second party, including deeds of trust, mortgage, lien or judgment interests to subrogate their interests to that of the State of Alaska in the real property which has been offered by the individual Surety.

A title insurance policy with the State of Alaska as a named beneficiary and a current (within 3 months) professional appraisal or assessed valuation will be required to ascertain the true value of the property offered as collateral. If buildings or other valued improvements are involved then fire and casualty

insurance with the State of Alaska as a named insured and in limits and coverages acceptable to the Contracting Officer shall be required. The appraiser shall acknowledge in writing that the appraisal is prepared for the benefit of the DEPARTMENT and the DEPARTMENT has the right to rely on its contents. This *Deed* must be recorded in the recording office where the property is located.

With respect to clauses “a” and “b” above the *Deed of Trust* or other accepted security shall not be released until 12 months after Final Acceptance of the Project and settlement of all outstanding claims.

5.3 Replacement of Bond and Surety:

If the Surety on any bond furnished in connection with this Contract is declared bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.2, or otherwise becomes unacceptable to the DEPARTMENT, or if any such Surety fails to furnish reports as to his financial condition as requested by the DEPARTMENT, the CONTRACTOR shall within five days thereafter substitute another bond and Surety, both of which must be acceptable to DEPARTMENT.

An individual Surety may be replaced by a corporate Surety during the course of the Contract period. If the Surety desires to dispose of the collateral posted, the DEPARTMENT may, at its option, accept substitute collateral.

5.4 Insurance Requirements:

5.4.1 The CONTRACTOR shall provide evidence of insurance with a carrier or carriers satisfactory to the DEPARTMENT covering injury to persons and/or property suffered by the State of Alaska or a third party, as a result of operations which arise both out of and during the course of this Contract by the CONTRACTOR or by any Subcontractor. This coverage will also provide protection against injuries to all employees of the CONTRACTOR and the employees of any Subcontractor engaged in Work under this Contract.

5.4.2 The CONTRACTOR shall maintain in force at all times during the performance of Work under this agreement the following policies of insurance. Where specific limits and coverages are shown, it is understood that they shall be the minimum acceptable. The requirements of this paragraph shall not limit the CONTRACTOR’s responsibility to indemnify under paragraph 5.5. Additional insurance requirements specific to this Contract are contained in the Supplementary Conditions, when applicable.

a. Worker’s Compensation Insurance:

The Contractor shall provide and maintain, for all employees engaged in work under this contract, statutory limits coverage as required by AS 23.30.045.

The policy must waive subrogation against the State and include Employer’s Liability Protection with policy limits not less than:

\$500,000 each accident,
\$500,000 each disease.

b. Commercial General Liability Insurance: on an occurrence policy form covering all operations by or on behalf of the CONTRACTOR with combined single limits not less than:

\$1,000,000 each occurrence

\$1,000,000 for Personal Injury Liability

\$2,000,000 aggregate for Products-Completed Operations

\$2,000,000 general aggregate

The State of Alaska shall be named as additional insured. This insurance shall be considered to be primary and non-contributory to any other insurance carried by the State through self insurance or otherwise.

- c. Automobile Liability Insurance: covering all vehicles used by the Contractor in the performance of services under this agreement with combined single limits not less than:

\$1,000,000 each occurrence

- d. Builder's Risk Insurance: Coverage shall be on an "All Risk" completed value basis including "quake and flood" and protect the interests of the DEPARTMENT, the CONTRACTOR and Subcontractors at all tiers. Coverage shall include all materials, supplies and equipment that are intended for specific installation in the Project while such materials, supplies and equipment are located at the Project site, in transit from port of arrival to job site, or while temporarily located away from the Project site.

In addition to providing the above coverages the CONTRACTOR shall require that all indemnities obtained from any SUBCONTRACTORS be extended to include the State as an additional named indemnitee. CONTRACTOR shall further require that the State be named as an additional insured on all liability insurance policies maintained by all SUBCONTRACTORS under their contracts with CONTRACTOR, and that an appropriate waiver of subrogation in favor of the State be obtained with respect to all other insurance policies.

- e. Other Coverages: As specified in the Supplementary Conditions.

- 5.4.3 All insurance policies shall comply with, and be issued by insurers licensed to transact the business of insurance under AS 21. Failure to maintain insurance may, at the option of the Contracting Officer, be deemed Defective Work and remedied in accordance with the Contract.

Evidence of Insurance, consisting of a certificate of insurance or the policy declaration page with required endorsements attached thereto - all of which have been executed by the insurer's representative and issued to the DEPARTMENT - shall denote the type, amount, class of operations covered, effective (and retroactive) dates, and dates of expiration. Evidence of Insurance must provide for a 30-day prior notice of cancellation, nonrenewal or material change of conditions.

Evidence pertaining to Worker's Compensation, Commercial General Liability, or Automobile Liability is required for Award. All other coverages shall be evidenced prior to commencement of WORK. Acceptance by the DEPARTMENT of deficient evidence does not constitute a waiver of Contract requirements as provided for the Conditions of the Contract.

If a certificate of insurance is submitted as evidence it shall contain the following statement:

"This is to certify that the policies described herein comply with all aspects of the insurance requirements of (Contract Name and Number, and Project Number)."

5.5 Indemnification:

The CONTRACTOR shall indemnify, save harmless, and defend the DEPARTMENT, its agents and its employees from any and all claims, actions, or liabilities for injuries or damages sustained by any person or property arising directly or indirectly from the CONTRACTOR or SUBCONTRACTOR's performance of WORK under this Contract; however, this provision has no effect if, but only if, the sole proximate cause of the injury or damage is the DEPARTMENT's negligence.

ARTICLE 6 - CONTRACTOR'S RESPONSIBILITIES

6.1 Supervision of Work:

The CONTRACTOR shall supervise and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. All Work under this Contract shall be performed in a skillful and workmanlike manner. The CONTRACTOR shall be solely responsible for the means, methods, techniques, sequences and procedures of construction.

6.2 Superintendence by CONTRACTOR:

The CONTRACTOR shall keep on the Work at all times during its progress a competent resident superintendent. The Contracting Officer shall be advised in writing of the superintendent's name, local address, and telephone number. This written advice is to be kept current until Final Acceptance by the DEPARTMENT. The superintendent will be the CONTRACTOR's representative at the site and shall have full authority to act and sign documents on behalf of the CONTRACTOR.

All communications given to the superintendent shall be as binding as if given to the CONTRACTOR. The CONTRACTOR shall cooperate with the Contracting Officer in every way possible.

6.3 Character of Workers:

The CONTRACTOR shall provide a sufficient number of competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. The CONTRACTOR shall at all times maintain good discipline and order at the site. The Contracting Officer may, in writing, require the CONTRACTOR to remove from the Work any employee the Contracting Officer deems incompetent, careless, or otherwise detrimental to the progress of the Work, but the Contracting Officer shall have no duty to exercise this right.

6.4 CONTRACTOR to Furnish:

Unless otherwise specified in the General Requirements, the CONTRACTOR shall furnish and assume full responsibility for all materials, equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance testing, start-up and completion of the Work.

6.5 Materials and Equipment:

All materials and equipment shall be of specified quality and new, except as otherwise provided in the Contract Documents. If required by the Contracting Officer, the CONTRACTOR shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned, and conditioned in accordance with the instructions of the applicable Supplier except as otherwise provided in the Contract Documents; but no provision of any such instructions will be effective to assign to the DEPARTMENT or any of the DEPARTMENT's Consultants, agents or employees, any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraphs 2.3 or 2.4.

6.6 Anticipated Schedules:

6.6.1 Within reasonable time prior to the preconstruction conference the CONTRACTOR shall submit to the Contracting Officer for review an anticipated progress schedule indicating the starting and completion dates of the various stages of the Work.

6.6.2 Within fifteen days after the date of the Notice to Proceed, the CONTRACTOR shall submit to the Contracting Officer for review:

Anticipated schedule of Shop Drawing submissions; and

Anticipated Schedule of Values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work which will be confirmed in writing by the CONTRACTOR at the time of submission.

6.7 Finalizing Schedules:

Prior to processing the first Application for Payment the Contracting Officer and the CONTRACTOR will finalize schedules required by paragraph 6.6. The finalized progress schedule will be acceptable to the DEPARTMENT as providing information related to the orderly progression of the Work to completion within the Contract Time; but such acceptance will neither impose on the DEPARTMENT nor relieve the CONTRACTOR from full responsibility for the progress or scheduling of the Work. If accepted, the finalized schedule of Shop Drawing and other required submissions will be acknowledgment by the DEPARTMENT as providing a workable arrangement for processing the submissions. If accepted, the finalized Schedule of Values will be acknowledgment by the DEPARTMENT as an approximation of anticipated value of Work accomplished over the anticipated Contract Time. Receipt and acceptance of a schedule submitted by the CONTRACTOR shall not be construed to assign responsibility for performance or contingencies to the DEPARTMENT or relieve the CONTRACTOR of his responsibility to adjust his forces, equipment, and work schedules as may be necessary to insure completion of the Work within prescribed Contract Time. Should the prosecution of the Work be discontinued for any reason, the CONTRACTOR shall notify the Contracting Officer at least 24 hours in advance of resuming operations.

6.8 Adjusting Schedules:

Upon substantial changes to the schedule or upon request the CONTRACTOR shall submit to the Contracting Officer for acceptance (to the extent indicated in paragraph 6.7 and the General Requirements) adjustments in the schedules to reflect the actual present and anticipated progress of the Work.

6.9 Substitutes or "Or-Equal" Items:

- 6.9.1 Whenever materials or equipment are specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier the naming of the item is intended to establish the type, function and quality required. Unless the name is followed by words indicating that substitution is limited or not permitted, materials or equipment of other Suppliers may be accepted by the Contracting Officer only if sufficient information is submitted by the CONTRACTOR which clearly demonstrates to the Contracting Officer that the material or equipment proposed is equivalent or equal in all aspects to that named. The procedure for review by the Contracting Officer will include the following as supplemented in the General Requirements.
- 6.9.2 Requests for review of substitute items of material and equipment will not be accepted by the Contracting Officer from anyone other than the CONTRACTOR.
- 6.9.3 If the CONTRACTOR wishes to furnish or use a substitute item of material or equipment, the CONTRACTOR shall make written application to the Contracting Officer for Approval thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as the specified. The application will state that the evaluation and Approval of the proposed substitute will not delay the CONTRACTOR's timely achievement of Substantial or Final Completion, whether or not acceptance of the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with the DEPARTMENT for Work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty.
- 6.9.4 All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which shall be considered by the DEPARTMENT in evaluating the proposed substitute. The DEPARTMENT may require the CONTRACTOR to furnish at the CONTRACTOR's expense additional data about the proposed substitute. The Contracting Officer may reject any substitution request which the Contracting Officer determines is not in the best interest of the DEPARTMENT.

6.10 Substitute Means and Methods:

If a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents, the CONTRACTOR may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to the Contracting Officer, if the CONTRACTOR submits sufficient information to allow the Contracting Officer to determine that the substitute proposed is equivalent to that indicated or required by the Contract Documents. The procedure for review by the Contracting Officer will be similar to that provided in paragraph 6.9 as applied by the Contracting Officer and as may be supplemented in the General Requirements.

6.11 Evaluation of Substitution:

The Contracting Officer will be allowed a reasonable time within which to evaluate each proposed substitute. The Contracting Officer will be the sole judge of acceptability, and no substitute will be ordered, installed or utilized without the Contracting Officer's prior written Approval which will be evidenced by either a Change Order or a Shop Drawing Approved in accordance with Sections 6.20 and 6.21. The Contracting Officer may require the CONTRACTOR to furnish at the CONTRACTOR's expense a special performance guarantee or other Surety with respect to any substitute.

6.12 Dividing the Work:

The divisions and sections of the Specifications and the identifications of any Drawings shall not control the CONTRACTOR in dividing the Work among Subcontractors or Suppliers or delineating the Work to be performed by any specific trade.

6.13 Subcontractors:

The CONTRACTOR may utilize the services of appropriately licensed Subcontractors on those parts of the Work which, under normal contracting practices, are performed by Subcontractors, in accordance with the following conditions:

- 6.13.1 The CONTRACTOR shall not award any Work to any Subcontractor without prior written Approval of the Contracting Officer. This Approval will not be given until the CONTRACTOR submits to the Contracting Officer a written statement concerning the proposed award to the Subcontractor which shall contain required Equal Employment Opportunity documents, evidence of insurance whose limits are acceptable to the CONTRACTOR, and an executed copy of the subcontract. All subcontracts submitted for Approval must contain provisions for payment for Work done by the Subcontractor within 7 days of receipt of payment by the CONTRACTOR. No acceptance by the Contracting Officer of any such Subcontractor shall constitute a waiver of any right of the DEPARTMENT to reject Defective Work.
- 6.13.2 The CONTRACTOR shall be fully responsible to the DEPARTMENT for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with CONTRACTOR just as CONTRACTOR is responsible for CONTRACTOR's own acts and omissions.
- 6.13.3 All Work performed for CONTRACTOR by a Subcontractor will be pursuant to an appropriate written agreement between CONTRACTOR and the Subcontractor which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the DEPARTMENT and contains waiver provisions as required by paragraph 13.17 and termination provisions as required by Article 14.
- 6.13.4 Nothing in the Contract Documents shall create any contractual relationship between the DEPARTMENT and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of the DEPARTMENT to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Regulatory Requirements. The DEPARTMENT will not undertake to settle any differences between or among the CONTRACTOR, Subcontractors, or Suppliers.
- 6.13.5 The CONTRACTOR and Subcontractors shall coordinate their work and cooperate with other trades so to facilitate general progress of Work. Each trade shall afford other trades every reasonable opportunity for installation of their work and storage of materials. If cooperative work of one trade must be altered due to lack

of proper supervision, or failure to make proper provisions in time by another trade, such conditions shall be remedied by the CONTRACTOR with no change in Contract Price or Contract Time.

- 6.13.6 The CONTRACTOR shall include on his own payrolls any person or persons working on this Contract who are not covered by written subcontract, and shall ensure that all Subcontractors include on their payrolls all persons performing Work under the direction of the Subcontractor.

6.14 Use of Premises:

The CONTRACTOR shall confine construction equipment, the storage of materials and equipment and the operations of workers to the Project limits and approved remote storage sites and lands and areas identified in and permitted by Regulatory Requirements, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. The CONTRACTOR shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any land or areas contiguous thereto, resulting from the performance of the Work. Should any claim be made against the DEPARTMENT by any such owner or occupant because of the performance of the Work, the CONTRACTOR shall hold the DEPARTMENT harmless.

6.15 Structural Loading:

The CONTRACTOR shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall the CONTRACTOR subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

6.16 Record Documents:

The CONTRACTOR shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Directives, Change Orders, Supplemental Agreements, and written interpretations and clarifications (issued pursuant to paragraph 3.6) in good order and annotated to show all changes made during construction. These record documents together with all Approved samples and a counterpart of all Approved Shop Drawings will be available to the Contracting Officer for reference and copying. Upon completion of the Work, the annotated record documents, samples and Shop Drawings will be delivered to the Contracting Officer. Record documents shall accurately record variations in the Work which vary from requirements shown or indicated in the Contract Documents.

6.17 Safety and Protection:

The CONTRACTOR alone shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. The CONTRACTOR shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

- 6.17.1 All employees on the Work and other persons and organizations who may be affected thereby;
- 6.17.2 All the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and
- 6.17.3 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.

The CONTRACTOR shall comply with all applicable Regulatory Requirements of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. The CONTRACTOR shall notify owners of adjacent property and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property caused, directly or indirectly, in whole or in part, by the CONTRACTOR, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by the CONTRACTOR with no change in Contract Price or Contract Time except as stated in 4.6, except damage or loss attributable to unforeseeable causes beyond the control of and without the fault or negligence of the CONTRACTOR, including but not restricted to acts

of God, of the public enemy or governmental authorities. The CONTRACTOR's duties and responsibilities for the safety and protection of the Work shall continue until Final Acceptance (except as otherwise expressly provided in connection with Substantial Completion).

6.18 Safety Representative:

The CONTRACTOR shall designate a responsible safety representative at the site. This person shall be the CONTRACTOR's superintendent unless otherwise designated in writing by the CONTRACTOR to the Contracting Officer.

6.19 Emergencies:

In emergencies affecting the safety or protection of persons or the Work or property at the site or adjacent thereto, the CONTRACTOR, without special instruction or authorization from the DEPARTMENT, is obligated to act to prevent threatened damage, injury or loss. The CONTRACTOR shall give the Contracting Officer prompt written notice if the CONTRACTOR believes that any significant changes in the Work or variations from the Contract Documents have been caused thereby. If the DEPARTMENT determines that a change in the Contract Documents is required because of the action taken in response to an emergency, a change will be authorized by one of the methods indicated in Paragraph 9.2, as determined appropriate by the Contracting Officer.

6.20 Shop Drawings and Samples:

- 6.20.1 After checking and verifying all field measurements and after complying with applicable procedures specified in the General Requirements, the CONTRACTOR shall submit to the Contracting Officer for review and Approval in accordance with the accepted schedule of Shop Drawing submissions the required number of all Shop Drawings, which will bear a stamp or specific written indication that the CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission. All submissions will be identified as the Contracting Officer may require. The data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to enable the Contracting Officer to review the information as required.
- 6.20.2 The CONTRACTOR shall also submit to the Contracting Officer for review and Approval with such promptness as to cause no delay in Work, all samples required by the Contract Documents. All samples will have been checked by and accompanied by a specific written indication that the CONTRACTOR has satisfied CONTRACTOR's responsibilities under the Contract Documents with respect to the review of the submission and will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended.
- 6.20.3 Before submission of each Shop Drawing or sample the CONTRACTOR shall have determined and verified all quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar data with respect thereto and reviewed or coordinated each Shop Drawing or sample with other Shop Drawings and samples and with the requirements of the Work and the Contract Documents.
- 6.20.4 At the time of each submission the CONTRACTOR shall give the Contracting Officer specific written notice of each variation that the Shop Drawings or samples may have from the requirements of the Contract Documents, and, in addition, shall cause a specific notation to be made on each Shop Drawing submitted to the Contracting Officer for review and Approval of each such variation. All variations of the proposed Shop Drawing from that specified will be identified in the submission and available maintenance, repair and replacement service will be indicated. The submittal will also contain an itemized estimate of all costs that will result directly or indirectly from acceptance of such variation, including costs of redesign and claims of other Contractors affected by the resulting change, all of which shall be considered by the DEPARTMENT in evaluating the proposed variation. If the variation may result in a change of Contract Time or Price, or Contract responsibility, and is not minor in nature; the CONTRACTOR must submit a written request for Change Order with the variation to notify the DEPARTMENT of his intent. The DEPARTMENT may require the CONTRACTOR to furnish at the CONTRACTOR's expense additional data about the proposed variation. The Contracting Officer may reject any variation request which the Contracting Officer determines is not in the best interest of the DEPARTMENT.

6.21 Shop Drawing and Sample Review:

- 6.21.1 The Contracting Officer will review with reasonable promptness Shop Drawings and samples, but the Contracting Officer's review will be only for conformance with the design concept of the Project and for compliance with the information given in the Contract Documents and shall not extend to means, methods, techniques, sequences or procedures of construction (except where a specific means, method, technique, sequence or procedure of construction is indicated in or required by the Contract Documents) or to safety precautions or programs incident thereto. The review of a separate item as such will not indicate acceptance of the assembly in which the item functions. The CONTRACTOR shall make corrections required by the Contracting Officer and shall return the required number of corrected copies of Shop Drawings and submit as required new samples for review. The CONTRACTOR shall direct specific attention in writing to revisions other than the corrections called for by the Contracting Officer on previous submittals.
- 6.21.2 The Contracting Officer's review of Shop Drawings or samples shall not relieve CONTRACTOR from responsibility for any variation from the requirements of the Contract Documents unless the CONTRACTOR has in writing advised the Contracting Officer of each such variation at the time of submission as required by paragraph 6.20.4. The Contracting Officer if he so determines, may give written Approval of each such variation by Change Order, except that, if the variation is minor and no Change Order has been requested a specific written notation thereof incorporated in or accompanying the Shop Drawing or sample review comments shall suffice as a modification. Approval by the Contracting Officer will not relieve the CONTRACTOR from responsibility for errors or omissions in the Shop Drawings or from responsibility for having complied with the provisions of paragraph 6.20.3.
- 6.21.3 The DEPARTMENT shall be responsible for all DEPARTMENT review costs resulting from the initial submission and the resubmittal. The CONTRACTOR shall, at the discretion of the Contracting Agency, pay all review costs incurred by the DEPARTMENT as a result of any additional re-submittals.
- 6.21.4 Where a Shop Drawing or sample is required by the Specifications, any related Work performed prior to the Contracting Officer's review and Approval of the pertinent submission will be the sole expense and responsibility of the CONTRACTOR.

6.22 Maintenance During Construction:

The CONTRACTOR shall maintain the Work during construction and until Substantial Completion, at which time the responsibility for maintenance shall be established in accordance with paragraph 13.10.

6.23 Continuing the Work:

The CONTRACTOR shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with the DEPARTMENT. No Work shall be delayed or postponed pending resolution of any disputes, disagreements, or claims except as the CONTRACTOR and the Contracting Officer may otherwise agree in writing.

6.24 Consent to Assignment:

The CONTRACTOR shall obtain the prior written consent of the Contracting Officer to any proposed assignment of any interest in, or part of this Contract. The consent to any assignment or transfer shall not operate to relieve the CONTRACTOR or his Sureties of any of his or its obligations under this Contract or the Performance Bonds. Nothing herein contained shall be construed to hinder, prevent, or affect an assignment of monies due, or to become due hereunder, made for the benefit of the CONTRACTOR's creditors pursuant to law.

6.25 Use of Explosives:

- 6.25.1 When the use of explosives is necessary for the prosecution of the Work, the CONTRACTOR shall exercise the utmost care not to endanger life or property, including new Work and shall follow all Regulatory Requirements applicable to the use of explosives. The CONTRACTOR shall be responsible for all damage resulting from the use of explosives.
- 6.25.2 All explosives shall be stored in a secure manner in compliance with all Regulatory Requirements, and all such storage places shall be clearly marked. Where no Regulatory Requirements apply, safe storage shall be provided not closer than 1,000 feet from any building, camping area, or place of human occupancy.

- 6.25.3 The CONTRACTOR shall notify each public utility owner having structures in proximity to the site of his intention to use explosives. Such notice shall be given sufficiently in advance to enable utility owners to take such steps as they may deem necessary to protect their property from injury. However, the CONTRACTOR shall be responsible for all damage resulting from the use of the explosives, whether or not, utility owners act to protect their property.

6.26 CONTRACTOR's Records:

- 6.26.1 Records of the CONTRACTOR and Subcontractors relating to personnel, payrolls, invoices of materials, and any and all other data relevant to the performance of this Contract, must be kept on a generally recognized accounting system. Such records must be available during normal work hours to the Contracting Officer for purposes of investigation to ascertain compliance with Regulatory Requirements and provisions of the Contract Documents.
- 6.26.2 Payroll records must contain the name and address of each employee, his correct classification, rate of pay, daily and weekly number of hours of work, deductions made, and actual wages paid. The CONTRACTOR and Subcontractors shall make employment records available for inspection by the Contracting Officer and representatives of the U.S. and/or State Department of Labor and will permit such representatives to interview employees during working hours on the Project.
- 6.26.3 Records of all communications between the DEPARTMENT and the CONTRACTOR and other parties, where such communications affected performance of this Contract, must be kept by the CONTRACTOR and maintained for a period of three years from Final Acceptance. The DEPARTMENT or its assigned representative may perform an audit of these records during normal work hours after written notice to the CONTRACTOR.

ARTICLE 7 - LAWS AND REGULATIONS

7.1 Laws to be Observed

The CONTRACTOR shall keep fully informed of all federal and state Regulatory Requirements and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the Work, or which in any way affect the conduct of the Work. The CONTRACTOR shall at all times observe and comply with all such Regulatory Requirements, orders and decrees; and shall protect and indemnify the DEPARTMENT and its representatives against claim or liability arising from or based on the violation of any such Regulatory Requirement, order, or decree whether by the CONTRACTOR, Subcontractor, or any employee of either. Except where otherwise expressly required by applicable Regulatory Requirements, the DEPARTMENT shall not be responsible for monitoring CONTRACTOR's compliance with any Regulatory Requirements.

7.2 Permits, Licenses, and Taxes

- 7.2.1 The CONTRACTOR shall procure all permits and licenses, pay all charges, fees and taxes, and give all notices necessary and incidental to the due and lawful prosecution of the Work. As a condition of performance of this Contract, the CONTRACTOR shall pay all federal, state and local taxes incurred by the CONTRACTOR, in the performance of this Contract. Proof of payment of these taxes is a condition precedent to final payment by the DEPARTMENT under this Contract.
- 7.2.2 The CONTRACTOR's certification that taxes have been paid (as contained in the *Release of Contract*) will be verified with the Department of Revenue and Department of Labor, prior to final payment.
- 7.2.3 If any federal, state or local tax is imposed, charged, or repealed after the date of bid opening and is made applicable to and paid by the CONTRACTOR on the articles or supplies herein contracted for, then the Contract shall be increased or decreased accordingly by a Change Order.

7.3 Patented Devices, Materials and Processes

If the CONTRACTOR employs any design, device, material, or process covered by letters of patent, trademark or copyright, the CONTRACTOR shall provide for such use by suitable legal agreement with the patentee or owner. The CONTRACTOR and the Surety shall indemnify and save harmless the DEPARTMENT, any affected third

party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the DEPARTMENT for any costs, expenses, and damages which it may be obliged to pay by reason of any infringement, at any time during the prosecution or after the completion of the Work.

7.4 Compliance of Specifications and Drawings:

If the CONTRACTOR observes that the Specifications and Drawings supplied by the DEPARTMENT are at variance with any Regulatory Requirements, CONTRACTOR shall give the Contracting Officer prompt written notice thereof, and any necessary changes will be authorized by one of the methods indicated in paragraph 9.2. as determined appropriate by the Contracting Officer. If the CONTRACTOR performs any Work knowing or having reason to know that it is contrary to such Regulatory Requirements, and without such notice to the Contracting Officer, the CONTRACTOR shall bear all costs arising therefrom; however, it shall not be the CONTRACTOR's primary responsibility to make certain that the Specifications and Drawings supplied by the DEPARTMENT are in accordance with such Regulatory Requirements.

7.5 Accident Prevention:

The CONTRACTOR shall comply with AS 18.60.075 and all pertinent provisions of the Construction Code Occupational Safety and Health Standards issued by the Alaska Department of Labor.

7.6 Sanitary Provisions:

The CONTRACTOR shall provide and maintain in a neat and sanitary condition such accommodations for the use of his employees and DEPARTMENT representatives as may be necessary to comply with the requirements of the State and local Boards of Health, or of other bodies or tribunals having jurisdiction.

7.7 Business Registration:

Comply with AS 08.18.011, as follows: "it is unlawful for a person to submit a bid or work as a contractor until he has been issued a certificate of registration by the Department of Commerce. A partnership or joint venture shall be considered registered if one of the general partners or venturers whose name appears in the name under which the partnership or venture does business is registered."

7.8 Professional Registration and Certification:

All craft trades, architects, engineers and land surveyors, electrical administrators, and explosive handlers employed under the Contract shall specifically comply with applicable provisions of AS 08.18, 08.48, 08.40, and 08.52. Provide copies of individual licenses within seven days following a request from the Contracting Officer.

7.9 Local Building Codes:

The CONTRACTOR shall comply with AS 35.10.025 which requires construction in accordance with applicable local building codes to include the obtaining of required permits.

7.10 Air Quality Control:

The CONTRACTOR shall comply with all applicable provisions of AS 46.03.04 as pertains to Air Pollution Control.

7.11 Archaeological or Paleontological Discoveries:

When the CONTRACTOR's operation encounters prehistoric artifacts, burials, remains of dwelling sites, or paleontological remains, such as shell heaps, land or sea mammal bones or tusks, the CONTRACTOR shall cease operations immediately and notify the Contracting Officer. No artifacts or specimens shall be further disturbed or removed from the ground and no further operations shall be performed at the site until so directed. Should the Contracting Officer order suspension of the CONTRACTOR's operations in order to protect an archaeological or historical finding, or order the CONTRACTOR to perform extra Work, such shall be covered by an appropriate Contract change document.

7.12 Applicable Alaska Preferences:

- 7.12.1 In determining the low bidder for State funded projects, a 5% bid preference has been given to "Alaska bidders", as required under AS 36.30.170. "Alaska bidder" means a person who:
- (1) holds a current Alaska business license;
 - (2) submits a bid for goods, services, or construction under the name as appearing on the person's current Alaska business license
 - (3) has maintained a place of business within the state staffed by the bidder or an employee of the bidder for a period of six months immediately preceding the date of the bid;
 - (4) is incorporated or qualified to do business under the laws of the state, is a sole proprietorship, and the proprietor is a resident of the state or is a partnership, and all partners are residents of the state; and
 - (5) if a joint venture, is composed entirely of ventures that qualify under (1) through (4), above.
- 7.12.2 In determining the low bidder for State funded projects, a 5% bid preference has been given to "Alaska Veteran bidders", as required under AS 36.30.175 for Alaska veteran-owned businesses. To qualify for the Veterans Preference (per AS 36.30.175), the bidder must:
- (1) Qualify for the Alaska Bidder's Preference
 - (2) Add value by actually performing the services or have prior experience in selling the supplies
 - (3) Qualify as an Alaska Veteran
 - (4) The value of the preference cannot exceed \$5,000.
- 7.12.3 In determining the low bidder for State funded projects, an "Alaska products" preference has been given as required under AS 36.30.326 - 36.30.332, when the bid documents designate the use of Alaska products. If the successful Bidder/CONTRACTOR proposes to use an Alaska product and does not do so, a penalty will be assessed against the successful Bidder/CONTRACTOR in an amount equal to the product preference percentage granted to the successful Bidder/CONTRACTOR plus one percent multiplied by the total declared value of the Alaska products proposed but not used.
- 7.12.4 Pursuant to AS 36.15.050 and AS 36.30.322, "agricultural/wood" products harvested in Alaska shall be used in State funded projects whenever they are priced no more than seven percent above agricultural/wood products harvested outside the state and are of a like quality as compared with agricultural/wood products harvested outside the state, when such products are not utilized, the CONTRACTOR shall document the efforts he made towards obtaining agricultural/wood products harvested in Alaska and include in this documentation a written statement that he contacted the manufacturers and suppliers identified on the Department of Commerce and Economic Development's list of suppliers of Alaska forest products concerning the availability of agricultural/wood products harvested in Alaska and, if available, the product prices. The CONTRACTOR's use of agricultural/wood products that fail to meet the requirements of this section shall be subject to the provisions of paragraphs 12.6 through 12.9 relating to Defective Work.
- 7.12.5 The CONTRACTOR shall maintain records, in a format acceptable to the Contracting Officer, which establish the type and extent of "agricultural/wood" and "Alaska" products utilized. All record keeping and documentation associated with the requirements 7.12.2 and 7.12.3 of this paragraph, must be provided to the DEPARTMENT upon written request or as otherwise provided within the Contract Documents.

7.13 Preferential Employment:

The CONTRACTOR shall comply with all applicable and valid laws and regulations regarding the hiring of Alaska residents now in effect or that might subsequently take effect during the term of this Contract. In order to ensure that CONTRACTOR's Subcontractors will comply with all applicable laws and regulations regarding the hiring of Alaska residents now in effect or that might subsequently take effect, the CONTRACTOR shall include in its contracts with Subcontractors under this Contract language that is substantially the same as the first sentence of this provision.

7.14 Wages and Hours of Labor:

- 7.14.1 One certified copy of all payrolls shall be submitted weekly to the State Department of Labor and, upon request, to the Contracting Officer to assure to assure compliance with AS 36.05.040, *Filing Schedule of Employees Wages Paid and Other Information*. The CONTRACTOR shall be responsible for the submission of certified copies of payrolls of all Subcontractors. The certification shall affirm that the payrolls are current and complete, that the wage rates contained therein are not less than the applicable rates referenced in these

Contract Documents, and that the classification set forth for each laborer or mechanic conforms with the Work he performed. The CONTRACTOR and his Subcontractors shall attend all hearings and conferences and produce such books, papers, and documents all as requested by the Department of Labor. Should federal funds be involved, the appropriate federal agency shall also receive a copy of the CONTRACTOR's certified payrolls.

7.14.2 The following labor provisions shall also apply to this Contract:

- a. The CONTRACTOR and his Subcontractors shall pay all employees unconditionally and not less than once a week;
- b. wages may not be less than those stated under AS 36.05.010, regardless of the contractual relationship between the CONTRACTOR or Subcontractors and laborers, mechanics, or field surveyors;
- c. the scale of wages to be paid shall be posted by the CONTRACTOR in a prominent and easily accessible place at the site of the Work;
- d. the DEPARTMENT shall withhold so much of the accrued payments as is necessary to pay to laborers, mechanics, or field surveyors employed by the CONTRACTOR or Subcontractors the difference between
 1. The rates of wages required by the Contract to be paid laborers, mechanics, or field surveyors on the Work, and
 2. The rates of wages in fact received by laborers, mechanics or field surveyors.

7.15 Overtime Work Hours and Compensation:

Pursuant to 40 U.S.C. 327-330 and AS 23.10.060 -.110, the CONTRACTOR shall not require nor permit any laborer or mechanic in any workweek in which he is employed on any Work under this Contract to work in excess of eight hours in any Calendar Day or in excess of forty hours in such workweek on Work subject to the provisions of the *Contract Work Hours and Safety Standards Act* unless such laborer or mechanic receives compensation at a rate not less than one and one half times his basic rate of pay for all such hours worked in excess of eight hours in any Calendar Day or in excess of forty hours in such workweek whichever is the greater number of overtime hours.

In the event of any violation of this provision, the CONTRACTOR shall be liable to any affected employee for any amounts due and penalties and to the DEPARTMENT for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic employed in violation of this provision in the sum of \$10.00 for each Calendar Day on which such employee was required or permitted to be employed on such Work in excess of eight hours or in excess of the standard workweek of forty hours without payment of the overtime wages required by this paragraph.

7.16 Covenant Against Contingent Fees:

The CONTRACTOR warrants that no person or selling agent has been employed or retained to solicit or secure this Contract upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide employees or bona fide established commercial or selling agencies maintained by the CONTRACTOR for the purpose of securing business. For breach or violation of this warrant, the DEPARTMENT shall have the right to annul this Contract without liability or, in its discretion, to deduct price of consideration from the Contract or otherwise recover the full amount of such commission, percentage, brokerage, or contingent fee.

7.17 Officials Not to Benefit:

No member of or delegate to the U.S. Congress, the Alaska State Legislature or other state official shall be admitted to any share or part of this Contract, nor to any benefit that may arise there from. However, this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit.

7.18 Personal Liability of Public Officials:

In carrying out any of the provisions thereof, or in exercising any power or authority granted to the Contracting Officer by the Contract, there will be no liability upon the Contracting Officer nor upon state employees authorized

as his representatives, either personally or as officials of the State of Alaska, it being always understood that in such matters they act as agents and representatives of the DEPARTMENT.

ARTICLE 8 - OTHER WORK

8.1 Related Work at Site:

- 8.1.1 The DEPARTMENT reserves the right at any time to contract for and perform other or additional work on or near the Work covered by the Contract.
- 8.1.2 When separate contracts are let within the limits of the Project, the CONTRACTOR shall conduct his Work so as not to interfere with or hinder the work being performed by other contractors. The CONTRACTOR when working on the same Project with other contractors shall cooperate with such other contractors. The CONTRACTOR shall join his Work with that of the others in an acceptable manner and shall perform it in proper sequence to that of others.
- 8.1.3 If the fact that other such work is to be performed is identified or shown in the Contract Documents the CONTRACTOR shall assume all liability, financial or otherwise, in connection with this Contract and indemnify and save harmless the DEPARTMENT from any and all damages or claims that may arise because of inconvenience, delay, or loss experienced by the CONTRACTOR because of the presence and operations of other contractors.
- 8.1.4 If the fact that such other work is to be performed was not identified or shown in the Contract Documents, written notice thereof will be given to the CONTRACTOR prior to starting any such other work. If the CONTRACTOR believes that such performance will require an increase in Contract Price or Contract Time, the CONTRACTOR shall notify the Contracting Officer of such required increase within fifteen (15) calendar days following receipt of the Contracting Officer's notice. Should the Contracting Officer find such increase(s) to be justified, a Change Order will be executed.

8.2 Access, Cutting, and Patching:

The CONTRACTOR shall afford each utility owner and any other contractor who is a party to such a direct contract with the DEPARTMENT (or the DEPARTMENT, if the DEPARTMENT is performing the additional work with the DEPARTMENT's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such work, and shall properly connect and coordinate the Work with the work of others. The CONTRACTOR shall do all cutting, fitting and patching of the Work that may be required to make its several parts come together properly and integrate with such other work, the CONTRACTOR shall not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter such other work with the written consent of the Contracting Officer. The duties and responsibilities of the CONTRACTOR under this paragraph are for the benefit of other contractors to the extent that there are comparable provisions for the benefit of the CONTRACTOR in said direct contracts between the DEPARTMENT and other contractors.

8.3 Defective Work by Others:

If any part of the CONTRACTOR's Work depends for proper execution or results upon the work of any such other contractor, utility owner, or the DEPARTMENT, the CONTRACTOR shall inspect and promptly report to the Contracting Officer in writing any delays, defects or deficiencies in such work that render it unavailable or unsuitable for such proper execution and results. The CONTRACTOR's failure to so report will constitute an acceptance of the other work as fit and proper for integration with CONTRACTOR's Work except for latent or nonapparent defects and deficiencies in the other work.

8.4 Coordination:

If the DEPARTMENT contracts with others for the performance of other work at the site, Contracting Officer will have authority and responsibility for coordination of the activities among the various prime contractors.

ARTICLE 9 - CHANGES

9.1 DEPARTMENT's Right to Change

Without invalidating the Contract and without notice to any Surety, the DEPARTMENT may, at any time or from time to time, order additions, deletions or revisions in the Work within the general scope of the Contract, including but not limited to changes:

- 9.1.1 In the Contract Documents;
- 9.1.2 In the method or manner of performance of the Work;
- 9.1.3 In State-furnished facilities, equipment, materials, services, or site;
- 9.1.4 Directing acceleration in the performance of the Work.

9.2 Authorization of Changes within the General Scope.

Additions, deletions, or revisions in the Work within the general scope of the Contract as specified in 9.1 shall be authorized by one or more of following ways:

- 9.2.1 Directive (pursuant to paragraph 9.3)
- 9.2.2 A Change Order (pursuant to paragraph 9.4)
- 9.2.3 DEPARTMENT's acceptance of Shop Drawing variations from the Contract Documents as specifically identified by the CONTRACTOR as required by paragraph 6.20.4.

9.3 Directive

- 9.3.1 The Contracting Officer shall provide written clarification or interpretation of the Contract Documents (pursuant to paragraph 3.6).
- 9.3.2 The Contracting Officer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Time and are consistent with the overall intent of the Contract Documents.
- 9.3.3 The Contracting Officer may order the Contractor to correct Defective Work or methods which are not in conformance with the Contract Documents.
- 9.3.4 The Contracting Officer may direct the commencement or suspension of Work or emergency related Work (as provided in paragraph 6.19).
- 9.3.5 Upon the issuance of a Directive to the CONTRACTOR by the Contracting Officer, the CONTRACTOR shall proceed with the performance of the Work as prescribed by such Directive.
- 9.3.6 If the CONTRACTOR believes that the changes noted in a Directive may cause an increase in the Contract Price or an extension of Contract Time, the CONTRACTOR shall immediately provide written notice to the Contracting Officer depicting such increases before proceeding with the Directive, except in the case of an emergency. If the Contracting Officer finds the increase in Contract Price or the extension of Contract Time justified, a Change Order will be issued. If however, the Contracting Officer does not find that a Change Order is justified, the Contracting Officer may direct the CONTRACTOR to proceed with the Work. The CONTRACTOR shall cooperate with the Contracting Officer in keeping complete daily records of the cost of such Work. If a Change Order is ultimately determined to be justified, in the absence of agreed prices and unit prices, payment for such Work will be made on a "cost of the work basis" as provided in 10.4

9.4 Change Order

A change in Contract Time, Contract Price, or responsibility may be made for changes within the scope of the Work only by Change Order. Upon receipt of an executed Change Order, the CONTRACTOR shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents except as otherwise specifically provided. Changes in Contract Price and Contract Time shall be made in accordance with Articles 10 and 11.

9.5 Shop Drawing Variations

Variations by shop drawings shall only be eligible for consideration under 9.4 when the conditions affecting the price, time, or responsibility are identified by the CONTRACTOR in writing and a request for a Change Order is submitted as per 6.20.4.

9.6 Changes Outside the General Scope; Supplemental Agreement

Any change which is outside the general scope of the Contract, as determined by the Contracting Officer, must be authorized by a Supplemental Agreement signed by the appropriate representatives of the DEPARTMENT and the CONTRACTOR.

9.7 Unauthorized Work:

The CONTRACTOR shall not be entitled to an increase in the Contract Price or an extension of the Contract Time with respect to any work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in this Article 9, except in the case of an emergency as provided in paragraph 6.19 and except in the case of uncovering Work as provided in paragraph 12.4.2.

9.8 Notification of Surety:

If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Time) is required by the provisions of any bond to be given to a Surety, the giving of any such notice will be the CONTRACTOR's responsibility, and the amount of each applicable bond will be adjusted accordingly.

9.9 Differing Site Conditions:

- 9.9.1 The CONTRACTOR shall promptly, and before such conditions are disturbed (except in an emergency as permitted by paragraph 6.19), notify the Contracting Officer in writing of: (1) subsurface or latent physical conditions at the site differing materially from those indicated in the Contract, and which could not have been discovered by a careful examination of the site, or (2) unknown physical conditions at the site, of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in this Contract. The Contracting Officer shall promptly investigate the conditions, and if the Contracting Officer finds that such conditions do materially so differ and cause an increase or decrease in the CONTRACTOR's cost of, or time required for, performance of this Contract, an equitable adjustment shall be made and the Contract modified in writing accordingly.
- 9.9.2 Any claim for additional compensation by the CONTRACTOR under this clause shall be made in accordance with Article 15. In the event that the Contracting Officer and the CONTRACTOR are unable to reach an agreement concerning an alleged differing site condition, the CONTRACTOR will be required to keep an accurate and detailed record which will indicate the actual "cost of the work" done under the alleged differing site condition. Failure to keep such a record shall be a bar to any recovery by reason of such alleged differing site conditions. The Contracting Officer shall be given the opportunity to supervise and check the keeping of such records.

ARTICLE 10 - CONTRACT PRICE; COMPUTATION AND CHANGE

10.1 Contract Price:

The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to the CONTRACTOR for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the CONTRACTOR shall be at his expense without change in the Contract Price. The Contract Price may only be changed by a Change Order or Supplemental Agreement.

10.2 Claim for Price Change:

Any claim for an increase or decrease in the Contract Price shall be submitted in accordance with the terms of Article 15, and shall not be allowed unless notice requirements of this Contract have been met.

10.3 Change Order Price Determination:

The value of any Work covered by a Change Order for an increase or decrease in the Contract Price shall be determined in one of the following ways:

- 10.3.1 Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved (subject to the provisions of subparagraphs 10.9.1 through 10.9.3, inclusive).
- 10.3.2 By mutual acceptance of a lump sum price which includes overhead and profit.
- 10.3.3 When 10.3.1 and 10.3.2 are inapplicable, on the basis of the "cost of the work" (determined as provided in paragraphs 10.4 and 10.5) plus a CONTRACTOR's fee for overhead and profit (determined as provided in paragraph 10.6).
- 10.3.4 Before a Change Order or Supplemental Agreement is Approved, the CONTRACTOR shall submit cost or pricing data regarding the changed or extra Work. The CONTRACTOR shall certify that the data submitted is, to his best knowledge and belief, accurate, complete and current as of a mutually determined specified date and that such data will continue to be accurate and complete during the performance of the changed or extra Work.

10.4 Cost of the Work:

The term "cost of the work" means the sum of all costs necessarily incurred and paid by the CONTRACTOR in the proper performance of the Work. Except as otherwise may be agreed to in writing by the DEPARTMENT, such costs shall be in amount no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in subparagraph 10.5:

- 10.4.1 Payroll costs for employees in the direct employ of the CONTRACTOR in the performance of the Work under schedules of job classifications agreed upon by the DEPARTMENT and the CONTRACTOR. Payroll costs for employees not employed full time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' or workmen's compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. Such employees shall include superintendents and foremen at the site. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by the DEPARTMENT.
- 10.4.2 Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to the CONTRACTOR unless the DEPARTMENT deposits funds with the CONTRACTOR with which to make payments, in which case the cash discounts shall accrue to the DEPARTMENT. All trade discounts, rebates and refunds and all returns from sale of surplus materials and equipment shall accrue to the DEPARTMENT, and the CONTRACTOR shall make provisions so that they may be obtained.
- 10.4.3 Payments made by the CONTRACTOR to Subcontractors for Work performed by Subcontractors. If required by the DEPARTMENT, CONTRACTOR shall obtain competitive quotes from Subcontractors or Suppliers acceptable to the CONTRACTOR and shall deliver such quotes to the DEPARTMENT who will then determine which quotes will be accepted. If a subcontract provides that the Subcontractor is to be paid on the basis of "cost of the work" plus a fee, the Subcontractor's "cost of the work" shall be determined in the same manner as the CONTRACTOR's "cost of work" as described in paragraphs 10.4 through 10.5; and the Subcontractor's fee shall be established as provided for under subparagraph 10.6.2 clause b. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.
- 10.4.4 Costs of special consultants (including but not limited to engineers, architects, testing laboratories, and surveyors) employed for services necessary for the completion of the Work.
- 10.4.5 Supplemental costs including the following:

- a. The proportion of necessary transportation, travel and subsistence expenses of the CONTRACTOR's employees incurred in discharge of duties connected with the Work.
- b. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of the CONTRACTOR.
- c. Rentals of all construction equipment and machinery and the parts thereof whether rented from the CONTRACTOR or others in accordance with rental agreements Approved by the DEPARTMENT and the costs of transportation, loading, unloading, installation, dismantling and removal thereof - all in accordance with terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.
- d. Sales, consumer, use or similar taxes related to the Work, and for which the CONTRACTOR is liable, imposed by Regulatory Requirements.
- e. Deposits lost for causes other than negligence of the CONTRACTOR, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.
- f. Losses and damages (and related expenses), not compensated by insurance or otherwise, to the Work or otherwise sustained by the CONTRACTOR in connection with the performance and furnishing of the Work provided they have resulted from causes other than the negligence of the CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and Approval of the DEPARTMENT. No such losses, damages and expenses shall be included in the "cost of the work" for the purpose of determining the CONTRACTOR's fee. If, however, any such loss or damage requires reconstruction and the CONTRACTOR is placed in charge thereof, the CONTRACTOR shall be paid for services a fee proportionate to that stated in paragraphs 10.6.2.a and 10.6.2.b.
- g. The cost of utilities, fuel and sanitary facilities at the site.
- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.
- I. Cost of premiums for additional bonds and insurance required because of changes in the Work and premiums for property insurance coverage within the limits of the deductible amounts established by the DEPARTMENT in accordance with Article 5.

10.5 Excluded Costs:

The term "cost of the work" shall not include any of the following:

- 10.5.1 Payroll costs and other compensation of CONTRACTOR's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agency, expeditors, timekeepers, clerks and other personnel employed by CONTRACTOR whether at the site or in CONTRACTOR's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 10.4.1 or specifically covered by paragraph 10.4.4 all of which are to be considered administrative costs covered by the CONTRACTOR's fee.
- 10.5.2 Expenses of CONTRACTOR's principal and branch offices other than CONTRACTOR's office at the site.
- 10.5.3 Any part of CONTRACTOR's capital expenses including interest on CONTRACTOR's capital employed for the Work and charges against CONTRACTOR for delinquent payments.
- 10.5.4 Cost of premiums for all bonds and for all insurance whether or not CONTRACTOR is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 10.4.5.i above).

- 10.5.5 Costs due to the negligence of CONTRACTOR, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the correction of Defective Work, disposal of materials or equipment wrongly supplied and making good any damage to property.
- 10.5.6 Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 10.4.

10.6 CONTRACTOR's Fee:

The CONTRACTOR's fee allowed to CONTRACTOR for overhead and profit shall be determined as follows.

- 10.6.1 A mutually acceptable fixed fee; or if none can be agreed upon.
- 10.6.2 A fee based on the following percentages of the various portions of the "cost of the work":
- a. For costs incurred under paragraphs 10.4.1 and 10.4.2, the CONTRACTOR's fee shall be twenty percent;
 - b. For costs incurred under paragraph 10.4.3, the CONTRACTOR's fee shall be ten percent; and if a subcontract is on the basis of "cost of the work" plus a fee, the maximum allowable to CONTRACTOR on account of overhead and profit of all Subcontractors and multiple tiers thereof shall be fifteen percent;
 - c. No fee shall be payable on the basis of costs itemized under paragraphs 10.4.4, 10.4.5 and 10.5;
 - d. The amount of credit to be allowed by the CONTRACTOR to the DEPARTMENT for any such change which results in a net decrease in cost will be the amount of the actual net decrease plus a deduction in CONTRACTOR's fee by an amount equal to ten percent of the net decrease; and
 - e. When both additions and credits are involved in any one change, the adjustment in CONTRACTOR's fee shall be computed on the basis of the net change in accordance with paragraphs 10.6.2.a through 10.6.2.d, inclusive.

10.7 Cost Breakdown:

Whenever the cost of any Work is to be determined pursuant to paragraphs 10.4 and 10.5, the CONTRACTOR will submit in a form acceptable to the DEPARTMENT an itemized cost breakdown together with supporting data.

10.8 Cash Allowances:

It is understood that CONTRACTOR has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be done by such Subcontractors or Suppliers and for such sums within the limit of the allowances as may be acceptable to the Contracting Officer. CONTRACTOR agrees that:

- 10.8.1 The allowances include the cost to CONTRACTOR (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the site, and all applicable taxes; and
- 10.8.2 CONTRACTOR's cost for unloading and handling on the site, labor, installation costs, overhead, profit and other expenses contemplated for the allowances have been included in the Contract Price and not in the allowances. No demand for additional payment on account of any thereof will be valid.

Prior to final payment, an appropriate Change Order will be issued to reflect actual amounts due the CONTRACTOR on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

10.9 Unit Price Work:

- 10.9.1 Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum of the established unit prices for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Contract. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of bids and determining an initial Contract Price. Determinations of the

actual quantities and classifications of Unit Price Work performed by the CONTRACTOR will be made by the DEPARTMENT in accordance with paragraph 10.10.

- 10.9.2 Each unit price will be deemed to include an amount considered by the CONTRACTOR to be adequate to cover the CONTRACTOR's overhead and profit for each separately identified item. If the "Basis of Payment" clause in the Contract Documents relating to any unit price in the bid schedule requires that the said unit price cover and be considered compensation for certain work or material essential to the item, this same work or material will not also be measured or paid for under any other pay item which may appear elsewhere in the Contract Documents.
- 10.9.3 Payment to the CONTRACTOR shall be made only for the actual quantities of Work performed and accepted or materials furnished, in conformance with the Contract Documents. When the accepted quantities of Work or materials vary from the quantities stated in the bid schedule, or change documents, the CONTRACTOR shall accept as payment in full, payment at the stated unit prices for the accepted quantities of Work and materials furnished, completed and accepted; except as provided below:
- a. When the quantity of Work to be done or material to be furnished under any item, for which the total cost of the item exceeds 10% of the total Contract Price, is increased by more than 25 percent of the quantity stated in the bid schedule, or change documents, either party to the Contract, upon demand, shall be entitled to an equitable unit price adjustment on that portion of the Work above 125 percent of the quantity stated in the bid schedule.
 - b. When the quantity of Work to be done or material to be furnished under any major item, for which the total cost of the item exceeds 10% of the total Contract Price, is decreased by more than 25 percent of the quantity stated in the bid schedule, or change documents either party to the Contract, upon demand, shall be entitled to an equitable price adjustment for the quantity of Work performed or material furnished, limited to a total payment of not more than 75 percent of the amount originally bid for the item.

10.10 Determinations for Unit Prices:

The Contracting Officer will determine the actual quantities and classifications of Unit Price Work performed by the CONTRACTOR. The Contracting Officer will review with the CONTRACTOR preliminary determinations on such matters before finalizing the costs and quantities on the Schedule of Values. The Contracting Officer's acknowledgment thereof will be final and binding on the CONTRACTOR, unless, within 10 days after the date of any such decisions, the CONTRACTOR delivers to the Contracting Officer written notice of intention to appeal from such a decision.

10.11 Disadvantaged and Women Business Enterprises (DBE & WBE) Program:

The Contract Price shall be adjusted by such means as provided in the section entitled "Phase III - Determination of Liquidated Damages and Bonuses", DISADVANTAGED AND WOMEN BUSINESS ENTERPRISE (DBE & WBE) PROGRAM, Form 25A300.

ARTICLE 11 - CONTRACT TIME; COMPUTATION AND CHANGE

11.1 Commencement of Contract Time; Notice to Proceed:

The Contract Time will commence to run on the day indicated in the Notice to Proceed.

11.2 Starting the Work:

No Work on Contract items shall be performed before the effective date of the Notice to Proceed. The CONTRACTOR shall notify the Contracting Officer at least 24 hours in advance of the time actual construction operations will begin. The CONTRACTOR may request a limited Notice to Proceed after Award has been made, to permit him to order long lead materials which could cause delays in Project completion. However, granting is within the sole discretion of the Contracting Officer, and refusal or failure to grant a limited Notice to Proceed shall not be a basis for claiming for delay, extension of time, or alteration of price.

11.3 Computation of Contract Time:

- 11.3.1 When the Contract Time is specified on a Calendar Day basis, all Work under the Contract shall be completed within the number of Calendar Days specified. The count of Contract Time begins on the day following receipt of the Notice to Proceed by the CONTRACTOR, if no starting day is stipulated therein.

Calendar Days shall continue to be counted against Contract Time until and including the date of Final Completion of the Work.

- 11.3.2 When the Contract completion time is specified as a fixed calendar date, it shall be the date of Final Completion.

11.4 Time Change:

The Contract Time may only be changed by a Change Order or Supplemental Agreement.

11.5 Extension Due to Delays:

The right of the CONTRACTOR to proceed shall not be terminated nor the CONTRACTOR charged with liquidated or actual damages because of delays to the completion of the Work due to unforeseeable causes beyond the control and without the fault or negligence of the CONTRACTOR, including, but not restricted to the following: acts of God or of the public enemy, acts of the DEPARTMENT in its contractual capacity, acts of another contractor in the performance of a contract with the DEPARTMENT, floods, fires, epidemics, quarantine restrictions, strikes, freight embargoes, unusually severe weather and delays of Subcontractors or Suppliers due to such causes. Any delay in receipt of materials on the site, caused by other than one of the specifically mentioned occurrences above, does not of itself justify a time extension, provided that the CONTRACTOR shall within twenty four (24) hours from the beginning of any such delay (unless the Contracting Officer shall grant a further period of the time prior to the date of final settlement of the Contract), notify the Contracting Officer in writing of the cause of delay. The Contracting Officer shall ascertain the facts and the extent of the delay and extend the time for completing the Work when the findings of fact justify such an extension.

11.6 Essence of Contract:

All time limits stated in the Contract Documents are of the essence of the Contract.

11.7 Reasonable Completion Time:

It is expressly understood and agreed by and between the CONTRACTOR and the DEPARTMENT that the date of beginning and the time for Final Completion of the Work described herein are reasonable times for the completion of the Work.

11.8 Delay Damages:

Whether or not the CONTRACTOR's right to proceed with the Work is terminated, he and his Sureties shall be liable for damages resulting from his refusal or failure to complete the Work within the specified time.

Liquidated and actual damages for delay shall be paid by the CONTRACTOR or his Surety to the DEPARTMENT in the amount as specified in the Supplementary Conditions for each Calendar Day the completion of the Work or any part thereof is delayed beyond the time required by the Contract, or any extension thereof. If a listing of incidents resulting from a delay and expected to give rise to actual or liquidated damages is not established by the Contract Documents, then the CONTRACTOR and his Surety shall be liable to the DEPARTMENT for any actual damages occasioned by such delay. The CONTRACTOR acknowledges that the liquidated damages established herein are not a penalty but rather constitute an estimate of damages that the DEPARTMENT will sustain by reason of delayed completion. These liquidated and actual damages are intended as compensation for losses anticipated to arise, and include those items enumerated in the Supplementary Conditions.

These damages will continue to run both before and after termination in the event of default termination. These liquidated damages do not cover excess costs of completion or DEPARTMENT costs, fees, and charges related to repurchase. If a default termination occurs, the CONTRACTOR or his Surety shall pay in addition to these damages, all excess costs and expenses related to completion as provided by Article 14.2.5.

ARTICLE 12 - QUALITY ASSURANCE

12.1 Warranty and Guaranty:

The CONTRACTOR warrants and guarantees to the DEPARTMENT that all Work will be in accordance with the Contract Documents and will not be Defective. Prompt notice of all defects shall be given to the CONTRACTOR. All Defective Work, whether or not in place, may be rejected, corrected or accepted as provided for in this article.

12.2 Access to Work:

The DEPARTMENT and the DEPARTMENT's representatives, testing agencies and governmental agencies with jurisdiction interests will have access to the Work at reasonable times for their observation, inspecting and testing. The CONTRACTOR shall provide proper and safe conditions for such access.

12.3 Tests and Inspections:

12.3.1 The CONTRACTOR shall give the Contracting Officer timely notice of readiness of the Work for all required inspections, tests or Approvals.

12.3.2 If Regulatory Requirements of any public body having jurisdiction require any Work (or part thereof) to specifically be inspected, tested or approved, the CONTRACTOR shall assume full responsibility therefor, pay all costs in connection therewith and furnish the Contracting Officer the required certificates of inspection, testing or approval. The CONTRACTOR shall also be responsible for and shall pay all costs in connection with any inspection or testing required in connection with DEPARTMENT's acceptance of a Supplier of materials or equipment proposed to be incorporated in the Work, or of materials or equipment submitted for Approval prior to the CONTRACTOR's purchase thereof for incorporation in the Work. The cost of all inspections, tests and approvals in addition to the above which are required by the Contract Documents shall be paid by the CONTRACTOR. The DEPARTMENT may perform additional tests and inspections which it deems necessary to insure quality control. All such failed tests or inspections shall be at the CONTRACTOR's expense.

12.3.4 If any Work (including the work of others) that is to be inspected, tested or Approved is covered without written concurrence of the Contracting Officer, it must, if requested by the Contracting Officer, be uncovered for observation. Such uncovering shall be at the CONTRACTOR's expense unless the CONTRACTOR has given the Contracting Officer timely notice of CONTRACTOR's intention to cover the same and the Contracting Officer has not acted with reasonable promptness in response to such notice.

12.3.5 Neither observations nor inspections, tests or Approvals by the DEPARTMENT or others shall relieve the CONTRACTOR from the CONTRACTOR's obligations to perform the Work in accordance with the Contract Documents.

12.4 Uncovering Work:

12.4.1 If any Work is covered contrary to the written request of the Contracting Officer, it must, if requested by the Contracting Officer, be uncovered for the Contracting Officer's observation and replaced at the CONTRACTOR's expense.

12.4.2 If the Contracting Officer considers it necessary or advisable that covered Work be observed inspected or tested, the CONTRACTOR, at the Contracting Officer's request, shall uncover, expose or otherwise make available for observation, inspection or testing as the Contracting Officer may require, that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is Defective, the CONTRACTOR shall bear all direct, indirect and consequential costs of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) and the DEPARTMENT shall be entitled to an appropriate decrease in the Contract Price. If, however, such Work is not found to be Defective, the CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction.

12.5 DEPARTMENT May Stop the Work:

If the Work is Defective, or the CONTRACTOR fails to supply suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, the Contracting Officer 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 Contracting Officer to stop the Work shall not give rise to any duty on the part of the Contracting Officer to exercise this right for the benefit of the CONTRACTOR or any other party.

12.6 Correction or Removal of Defective Work:

If required by the Contracting Officer, the CONTRACTOR shall promptly, as directed, either correct all Defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the Contracting Officer, remove it from the site and replace it with Work which conforms to the requirements of the Contract Documents. The CONTRACTOR shall bear all direct, indirect and consequential costs of such correction or removal (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) made necessary thereby.

12.7 One Year Correction Period:

If within one year after the date of Final Completion or such longer period of time as may be prescribed by Regulatory Requirements or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be Defective, the CONTRACTOR shall promptly, without cost to the DEPARTMENT and in accordance with the Contracting Officer's written instructions, either correct such Defective Work, or, if it has been rejected by the Contracting Officer, remove it from the site and replace it with conforming Work. If the CONTRACTOR does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, the DEPARTMENT may have the Defective Work corrected or the rejected Work removed and replaced, and all direct, indirect and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys and other professionals) will be paid by the CONTRACTOR. In special circumstances where a particular item of equipment is placed in continuous service for the benefit of the DEPARTMENT before Substantial Completion of all the Work, the correction period for that item may begin on an earlier date if so provided in the Specifications or by Change Order. Provisions of this paragraph are not intended to shorten the statute of limitations for bringing an action.

12.8 Acceptance of Defective Work:

Instead of requiring correction or removal and replacement of Defective Work, the Contracting Officer may accept Defective Work, the CONTRACTOR shall bear all direct, indirect and consequential costs attributable to the Contracting Officer's evaluation of and determination to accept such Defective Work (costs to include but not be limited to fees and charges of engineers, architects, attorneys and other professionals). If any such acceptance occurs prior to final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and the DEPARTMENT shall be entitled to an appropriate decrease in the Contract Price. If the DEPARTMENT has already made final payment to the CONTRACTOR, an appropriate amount shall be paid by the CONTRACTOR or his Surety to the DEPARTMENT.

12.9 DEPARTMENT May Correct Defective Work:

If the CONTRACTOR fails within a reasonable time after written notice from the Contracting Officer to proceed to correct Defective Work or to remove and replace rejected Work as required by the Contracting Officer in accordance with paragraph 12.6, or if the CONTRACTOR fails to perform the Work in accordance with the Contract Documents, or if the CONTRACTOR fails to comply with any other provision of the Contract Documents, the DEPARTMENT may, after 7 days' written notice to the CONTRACTOR, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph the DEPARTMENT shall proceed expeditiously. To the extent necessary to complete corrective and remedial action, the Contracting Officer may exclude the CONTRACTOR from all or part of the site, take possession of all or part of the Work, and suspend the CONTRACTOR's services related thereto, take possession of the CONTRACTOR's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or approved remote storage sites or for which the DEPARTMENT has paid the CONTRACTOR but which are stored elsewhere. The CONTRACTOR shall allow the Contracting Officer and his authorized representatives such access to the site as may be necessary to enable the Contracting Officer to exercise the rights and remedies under this

paragraph. All direct, indirect and consequential costs of the DEPARTMENT in exercising such rights and remedies will be charged against the CONTRACTOR, and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and the DEPARTMENT shall be entitled to an appropriate decrease in the Contract Price. Such direct, indirect and consequential costs will include but not be limited to fees and charges of engineers, architects, attorneys and other professionals, all court and arbitration costs and all costs of repair and replacement of work of others destroyed or damaged by correction, removal or replacement of the CONTRACTOR's Defective Work. The CONTRACTOR shall not be allowed an extension of time because of any delay in performance of the work attributable to the exercise, by the Contracting Officer, of the DEPARTMENT's rights and remedies hereunder.

ARTICLE 13 - PAYMENTS TO CONTRACTOR AND COMPLETION

13.1 Schedule of Values:

The Schedule of Values established as provided in paragraph 6.6 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to the Contracting Officer. Progress payments on account of Unit Price Work will be based on the number of units completed.

13.2 Preliminary Payments:

Upon approval of the Schedule of Values the CONTRACTOR may be paid for direct costs substantiated by paid invoices and other prerequisite documents required by the General Requirements. Direct costs shall include the cost of bonds, insurance, approved materials stored on the site or at approved remote storage sites, deposits required by a Supplier prior to fabricating materials, and other approved direct mobilization costs substantiated as indicated above. These payments shall be included as a part of the total Contract Price as stated in the Contract.

13.3 Application for Progress Payment:

The CONTRACTOR shall submit to the Contracting Officer for review an Application for Payment filled out and signed by the CONTRACTOR covering the Work completed as of the date of the Application for Payment and accompanied by such supporting documentation as is required by the Contract Documents. Progress payments will be made as the Work progresses on a monthly basis or twice a month when requested by the CONTRACTOR, but only when the approved invoice exceeds \$10,000.00.

13.4 Review of Applications for Progress Payment:

Contracting Officer will either indicate in writing a recommendation of payment or return the Application for Payment to the CONTRACTOR indicating in writing the Contracting Officer's reasons for refusing to recommend payment. In the latter case, the CONTRACTOR may make the necessary corrections and resubmit the Application for Payment.

13.5 Stored Materials and Equipment:

If payment is requested on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the Application for Payment shall also be accompanied by a bill of sale, paid invoice or other documentation warranting that the DEPARTMENT has received the materials and equipment free and clear of all charges, security interests and encumbrances and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect the DEPARTMENT's interest therein, all of which will be satisfactory to the Contracting Officer. No payment will be made for perishable materials that could be rendered useless because of long storage periods. No progress payment will be made for living plant materials until planted.

13.6 CONTRACTOR's Warranty of Title:

The CONTRACTOR warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to the DEPARTMENT no later than the time of payment free and clear of any claims, liens, security interests and further obligations.

13.7 Withholding of Payments:

The DEPARTMENT may withhold or refuse payment for any of the reasons listed below provided it gives written notice of its intent to withhold and of the basis for withholding:

- 13.7.1 The Work is Defective, or completed Work has been damaged requiring correction or replacement, or has been installed without Approval of Shop Drawings, or by an unapproved Subcontractor, or for unsuitable storage of materials and equipment.
- 13.7.2 The Contract Price has been reduced by Change Order,
- 13.7.3 The DEPARTMENT has been required to correct Defective Work or complete Work in accordance with paragraph 12.9.
- 13.7.4 The DEPARTMENT's actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.2.1.a through 14.2.1.k inclusive.
- 13.7.5 Claims have been made against the DEPARTMENT or against the funds held by the DEPARTMENT on account of the CONTRACTOR's actions or inactions in performing this Contract, or there are other items entitling the DEPARTMENT to a set off.
- 13.7.6 Subsequently discovered evidence or the results of subsequent inspections or test, nullify any previous payments for reasons stated in subparagraphs 13.7.1 through 13.7.5.
- 13.7.7 The CONTRACTOR has failed to fulfill or is in violation of any of his obligations under any provision of this Contract.

13.8 Retainage:

At any time the DEPARTMENT finds that satisfactory progress is not being made it may in addition to the amounts withheld under 13.7 retain a maximum amount equal to 10% of the total amount earned on all subsequent progress payments. This retainage may be released at such time as the Contracting Officer finds that satisfactory progress is being made.

13.9 Request for Release of Funds:

If the CONTRACTOR believes the basis for withholding is invalid or no longer exists, immediate written notice of the facts and Contract provisions on which the CONTRACTOR relies, shall be given to the DEPARTMENT, together with a request for release of funds and adequate documentary evidence proving that the problem has been cured. In the case of withholding which has occurred at the request of the Department of Labor, the CONTRACTOR shall provide a letter from the Department of Labor stating that withholding is no longer requested. Following such a submittal by the CONTRACTOR, the DEPARTMENT shall have a reasonable time to investigate and verify the facts and seek additional assurances before determining whether release of withheld payments is justified.

13.10 Substantial Completion:

When the CONTRACTOR considers the Work ready for its intended use the CONTRACTOR shall notify the Contracting Officer in writing that the Work or a portion of Work which has been specifically identified in the Contract Documents is substantially complete (except for items specifically listed by the CONTRACTOR as incomplete) and request that the DEPARTMENT issue a certificate of Substantial Completion. Within a reasonable time thereafter, the Contracting Officer, the CONTRACTOR and appropriate Consultant(s) shall make an inspection of the Work to determine the status of completion. If the Contracting Officer does not consider the Work substantially complete, the Contracting Officer will notify the CONTRACTOR in writing giving the reasons therefor. If the Contracting Officer considers the Work substantially complete, the Contracting Officer will within fourteen days execute and deliver to the CONTRACTOR a certificate of Substantial Completion with tentative list of items to be completed or corrected. At the time of delivery of the certificate of Substantial Completion the Contracting Officer will deliver to the CONTRACTOR a written division of responsibilities pending Final Completion with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties which shall be consistent with the terms of the Contract Documents.

The DEPARTMENT shall be responsible for all DEPARTMENT costs resulting from the initial inspection and the first re-inspection, the CONTRACTOR shall pay all costs incurred by the DEPARTMENT resulting from re-inspections, thereafter.

13.11 Access Following Substantial Completion:

The DEPARTMENT shall have the right to exclude the CONTRACTOR from the Work after the date of Substantial Completion, but the DEPARTMENT shall allow CONTRACTOR reasonable access to complete or correct items on the tentative list.

13.12 Final Inspection:

Upon written notice from the CONTRACTOR that the entire Work or an agreed portion thereof is complete, the Contracting Officer will make a final inspection with the CONTRACTOR and appropriate Consultant(s) and will notify the CONTRACTOR in writing of all particulars in which this inspection reveals that the Work is incomplete or Defective. The CONTRACTOR shall immediately take such measures as are necessary to remedy such deficiencies. The CONTRACTOR shall pay for all costs incurred by the DEPARTMENT resulting from re-inspections.

13.13 Final Completion and Application for Payment:

After the CONTRACTOR has completed all such corrections to the satisfaction of the Contracting Officer and delivered all maintenance and operating instructions, schedules, guarantees, bonds, certificates of payment to all laborers, Subcontractors and Suppliers, certificates of inspection, marked-up record documents and other documents - all as required by the Contract Documents; and after the Contracting Officer has indicated in writing that the Work has met the requirements for Final Completion, and subject to the provisions of paragraph 13.18, the CONTRACTOR may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied by all remaining certificates, warranties, guarantees, releases, affidavits, and other documentation required by the Contract Documents.

13.14 Final Payment:

- 13.14.1 If on the basis of the Contracting Officer's observation of the Work during construction and final inspection, and the Contracting Officer's review of the final Application for Payment and accompanying documentation - all as required by the Contract Documents; and the Contracting Officer is satisfied that the Work has been completed and the CONTRACTOR's other obligations under the Contract Documents have been fulfilled, the DEPARTMENT will process final Application for Payment. Otherwise, the Contracting Officer will return the Application for Payment to the CONTRACTOR, indicating in writing the reasons for refusing to process final payment, in which case the CONTRACTOR shall make the necessary corrections and resubmit the final Application for Payment.
- 13.14.2 If, through no fault of the CONTRACTOR, Final Completion of the Work is significantly delayed, the Contracting Officer shall, upon receipt of the CONTRACTOR's final Application for Payment, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed and accepted. If the remaining balance to be held by the DEPARTMENT for Work not fully completed or corrected is less than the retainage provided for in paragraph 13.9, and if bonds have been furnished as required in paragraph 5.1, 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 DEPARTMENT with the application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

13.15 Final Acceptance:

Following certification of payment of payroll and revenue taxes, and final payment to the CONTRACTOR, the DEPARTMENT will issue a letter of Final Acceptance, releasing the CONTRACTOR from further obligations under the Contract, except as provided in paragraph 13.17.

13.16 CONTRACTOR's Continuing Obligation:

The CONTRACTOR's obligation to perform and complete the Work and pay all laborers, Subcontractors, and materialmen in accordance with the Contract Documents shall be absolute. Neither any progress or final payment by the DEPARTMENT, nor the issuance of a certificate of Substantial Completion, nor any use or occupancy of the Work or any part thereof by the DEPARTMENT or Using Agency, nor any act of acceptance by the DEPARTMENT nor any failure to do so, nor any review and Approval of a Shop Drawing or sample submission, nor any correction of Defective Work by the DEPARTMENT will constitute an acceptance of Work not in accordance with the Contract Documents or a release of the CONTRACTOR's obligation to perform the Work in accordance with the Contract Documents.

13.17 Waiver of Claims by CONTRACTOR:

The making and acceptance of final payment will constitute a waiver of all claims by the CONTRACTOR against the DEPARTMENT other than those previously made in writing and still unsettled.

13.18 No Waiver of Legal Rights:

The DEPARTMENT shall not be precluded or be estopped by any payment, measurement, estimate, or certificate made either before or after the completion and acceptance of the Work and payment therefor, from showing the true amount and character of the Work performed and materials furnished by the CONTRACTOR, nor from showing that any payment, measurement, estimate or certificate is untrue or is incorrectly made, or that the Work or materials are Defective. The DEPARTMENT shall not be precluded or estopped, notwithstanding any such measurement, estimate, or certificate and payment in accordance therewith, from recovering from the CONTRACTOR or his Sureties, or both, such damages as it may sustain by reason of his failure to comply with requirements of the Contract Documents. Neither the acceptance by the DEPARTMENT, or any representative of the DEPARTMENT, nor any payment for or acceptance of the whole or any part of the Work, nor any extension of the Contract Time, nor any possession taken by the DEPARTMENT, shall operate as a waiver of any portion of the Contract or of any power herein reserved, or of any right to damages. A waiver by the DEPARTMENT of any breach of the Contract shall not be held to be a waiver of any other subsequent breach.

ARTICLE 14 - SUSPENSION OF WORK, DEFAULT AND TERMINATION

14.1 DEPARTMENT May Suspend Work:

14.1.1 The DEPARTMENT may, at any time, suspend the Work or any portion thereof by notice in writing to the CONTRACTOR. If the Work is suspended without cause the CONTRACTOR shall be allowed an increase in the Contract Price or an extension of the Contract Time, or both, directly attributable to any suspension if the CONTRACTOR makes an Approved claim therefor as provided in Article 15. However, no adjustment shall be made under this clause for any suspension, delay, or interruption to the extent that suspension is due to the fault or negligence of the CONTRACTOR, or that suspension is necessary for Contract compliance, or that performance would have been so suspended, delayed, or interrupted by any other cause, including the fault or negligence of the CONTRACTOR.

14.1.2 In case of suspension of Work, the CONTRACTOR shall be responsible for preventing damage to or loss of any of the Work already performed and of all materials whether stored on or off the site or Approved remote storage sites.

14.2 Default of Contract:

14.2.1 If the CONTRACTOR:

- a. Fails to begin the Work under the Contract within the time specified in the Proposal, or

- b. Fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficiently skilled workmen, suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 6.6 as revised from time to time), or
 - c. Performs the Work unsuitably or neglects or refuses to remove materials or to correct Defective Work, or
 - d. Discontinues the prosecution of the Work, or
 - e. Fails to resume Work which has been discontinued within a reasonable time after notice to do so, or
 - f. Becomes insolvent, except that if the CONTRACTOR declares bankruptcy termination in accordance with all *U.S.C. 362* and/or *11 U.S.C. 365*. In the event the CONTRACTOR declares bankruptcy the CONTRACTOR agrees that the Contract will be assumed or rejected in a timely manner so that the Contract will be completed by the date specified in the Contract Documents, or
 - g. Allows any final judgment to stand against him unsatisfied for period of 60 days, or
 - h. Makes an assignment for the benefit of creditors without the consent of the Contracting Officer, or
 - i. Disregards Regulatory Requirements of any public body having jurisdiction, or
 - j. Otherwise violates in any substantial way any provisions of the Contract Documents, or
 - k. For any cause whatsoever, fails to carry on the Work in an acceptable manner, the Contracting Officer may give notice in writing to the CONTRACTOR and his Surety of such delay, neglect, or default.
- 14.2.2 If the CONTRACTOR or Surety, within the time specified in the above notice of default, shall not proceed in accordance therewith, then the DEPARTMENT may, upon written notification from the Contracting Officer of the fact of such delay, neglect or default and the CONTRACTOR's failure to comply with such notice, have full power and authority without violating the Contract, to take the prosecution of the Work out of the hands of the CONTRACTOR. The DEPARTMENT may terminate the services of the CONTRACTOR, exclude the CONTRACTOR from the site and take possession of the Work and of all the CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by the CONTRACTOR (without liability to the CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which the DEPARTMENT has paid the CONTRACTOR but which are stored elsewhere, and finish the Work as the DEPARTMENT may deem expedient. The DEPARTMENT may enter into an agreement for the completion of said Contract according to the terms and provisions thereof, or use such other methods that in the opinion of the Contracting Officer are required for the completion of said Contract in an acceptable manner.
- 14.2.3 The Contracting Officer may, by written notice to the CONTRACTOR and his Surety or his representative, transfer the employment of the Work from the CONTRACTOR to the Surety, or if the CONTRACTOR abandons the Work undertaken under the Contract, the Contracting Officer may, at his option with written notice to the Surety and without any written notice to the CONTRACTOR, transfer the employment for said Work directly to the Surety. The Surety shall submit its plan for completion of the Work, including any contracts or agreements with third parties for such completion, to the DEPARTMENT for Approval prior to beginning completion of the Work. Approval of such contracts shall be in accordance with all applicable requirements and procedures for Approval of subcontracts as stated in the Contract Documents.
- 14.2.4 Upon receipt of the notice terminating the services of the CONTRACTOR, the Surety shall enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the Work included under the Contract and employ by contract or otherwise any person or persons to finish the Work and provide the materials therefor, without termination of the continuing full force and effect of this Contract. In case of such transfer of employment to the Surety, the Surety shall be paid in its own name on estimates covering Work subsequently performed under the terms of the Contract and according to the terms thereof without any right of the CONTRACTOR to make any claim for the same or any part thereof.
- 14.2.5 If the Contract is terminated for default, the CONTRACTOR and the Surety shall be jointly and severally liable for damages for delay as provided by paragraph 11.8, and for the excess cost of completion, and all costs

and expenses incurred by the DEPARTMENT in completing the Work or arranging for completion of the Work, including but not limited to costs of assessing the Work to be done, costs associated with advertising, soliciting or negotiating for bids or proposals for completion, and other procurement costs. Following termination the CONTRACTOR shall not be entitled to receive any further balance of the amount to be paid under the Contract until the Work is fully finished and accepted, at which time if the unpaid balance exceeds the amount due the DEPARTMENT and any amounts due to persons for whose benefit the DEPARTMENT has withheld funds, such excess shall be paid by the DEPARTMENT to the CONTRACTOR. If the damages, costs, and expenses due the DEPARTMENT exceed the unpaid balance, the CONTRACTOR and his Surety shall pay the difference.

- 14.2.6 If, after notice of termination of the CONTRACTOR's right to proceed under the provisions of this clause, it is determined for any reason that the CONTRACTOR was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, or that termination was wrongful, the rights and obligations of the parties shall be determined in accordance with the clause providing for convenience termination.

14.3 Rights or Remedies:

Where the CONTRACTOR's services have been so terminated by the DEPARTMENT, the termination will not affect any rights or remedies of the DEPARTMENT against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due the CONTRACTOR by the DEPARTMENT will not release the CONTRACTOR from liability.

14.4 Convenience Termination:

- 14.4.1 The performance of the Work may be terminated by the DEPARTMENT in accordance with this section in whole or in part, whenever, for any reason the Contracting Officer shall determine that such termination is in the best interest of the DEPARTMENT. Any such termination shall be effected by delivery to the CONTRACTOR of a *Notice of Termination*, specifying termination is for the convenience of the DEPARTMENT the extent to which performance of Work is terminated, and the date upon which such termination becomes effective.

Immediately upon receipt of a *Notice of Termination* and except as otherwise directed by the Contracting Officer, the CONTRACTOR shall:

- a. Stop Work on the date and to the extent specified in the *Notice of Termination*;
- b. Place no further orders or subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the Work as is not terminated;
- c. Terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the *Notice of Termination*;
- d. With the written Approval of the Contracting Officer, to the extent he may require, settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, the cost of which would be reimbursable, in whole, or in part, in accordance with the provisions of the Contract;
- e. Submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory exclusive of items the disposition of which had been directed or authorized by the Contracting Officer;
- f. Transfer to the Contracting Officer the completed or partially completed record drawings, Shop Drawings, information, and other property which, if the Contract had been completed, would be required to be furnished to the DEPARTMENT;
- g. Take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to the Contract which is in the possession of the CONTRACTOR and in which the DEPARTMENT has or may acquire any interest.

The CONTRACTOR shall proceed immediately with the performance of the above obligations.

- 14.4.2 When the DEPARTMENT orders termination of the Work effective on a certain date, all Work in place as of that date will be paid for in accordance with Article 13 of the Contract. Materials required for completion and on hand but not incorporated in the Work will be paid for at invoice cost plus 15 % with materials becoming the property of the DEPARTMENT - or the CONTRACTOR may retain title to the materials and be paid an agreed upon lump sum. Materials on order shall be cancelled, and the DEPARTMENT shall pay reasonable factory cancellation charges with the option of taking delivery of the materials in lieu of payment of cancellation charges. The CONTRACTOR shall be paid 10% of the cost, freight not included, of materials cancelled, and direct expenses only for CONTRACTOR chartered freight transport which cannot be cancelled without charges, to the extent that the CONTRACTOR can establish them. The extra costs due to cancellation of bonds and insurance and that part of job start-up and phase-out costs not amortized by the amount of Work accomplished shall be paid by the DEPARTMENT. Charges for loss of profit or consequential damages shall not be recoverable except as provided above.
- 14.4.3 The termination claim shall be submitted promptly, but in no event later than 90 days from the effective date of termination, unless extensions in writing are granted by the Contracting Officer upon written request of the CONTRACTOR made within the 90 day period. Upon failure of the CONTRACTOR to submit his termination claim within the time allowed, the Contracting Officer 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.
- 14.4.4 The CONTRACTOR and the Contracting Officer may agree upon 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 section. The Contract shall be amended accordingly, and the CONTRACTOR shall be paid the agreed amount.

In the event of the failure of the CONTRACTOR and the Contracting Officer to agree in whole or in part, as provided heretofore, as to the amounts with respect to costs to be paid to the CONTRACTOR in connection with the termination of the Work the Contracting Officer shall determine, on the basis of information available to him, the amount, if any, due to the CONTRACTOR by reason of the termination and shall pay to the CONTRACTOR the amount determined as follows:

- a. All costs and expenses reimbursable in accordance with the Contract not previously paid to the CONTRACTOR for the performance of the Work prior to the effective date of the *Notice of Termination*;
 - b. So far as not included under "a" above, the cost of settling and paying claims arising out of the termination of the Work under subcontracts or orders which are properly chargeable to the terminated portions of the Contract;
 - c. The reasonable costs of settlement with respect to the terminated portion of the Contract heretofore, to the extent that these costs have not been covered under the payment provisions of the Contract.
- 14.4.5 The CONTRACTOR shall have the right of appeal under the DEPARTMENT's claim procedures, as defined in Article 15, for any determination made by the Contracting Officer, except if the CONTRACTOR has failed to submit his claim within the time provided and has failed to request extension of such time, CONTRACTOR shall have no such right of appeal.

In arriving at the amount due the CONTRACTOR under this section, there shall be deducted:

- a. All previous payments made to the CONTRACTOR for the performance of Work under the Contract prior to termination;
- b. Any claim for which the DEPARTMENT may have against the CONTRACTOR;
- c. 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 section and not otherwise recovered by or credited to the DEPARTMENT; and,
- d. All progress payments made to the CONTRACTOR under the provisions of this section.

- 14.4.6 Where the Work has been terminated by the DEPARTMENT said termination shall not affect or terminate any of the rights of the DEPARTMENT against the CONTRACTOR or his Surety then existing or which may thereafter accrue because of such default. Any retention or payment of monies by the DEPARTMENT due to the CONTRACTOR under the terms of the Contract shall not release the CONTRACTOR or his Surety from liability.

Unless otherwise provided for in the Contract Documents, or by applicable statute, the CONTRACTOR, from the effective date of termination and for a period of three years after final settlement under this Contract, shall preserve and make available to the DEPARTMENT at all reasonable times at the office of the CONTRACTOR, all its books, records, documents, and other evidence bearing on the cost and expenses of the CONTRACTOR under his Contract and relating to the Work terminated hereunder.

ARTICLE 15 - CLAIMS AND DISPUTES

15.1 Notification:

In addition to the notice requirements set out elsewhere in this Contract, if the CONTRACTOR becomes aware of any act or occurrence which may form the basis of a claim by the CONTRACTOR for additional compensation or an extension of time for performance, or if any dispute arises regarding a question of fact or interpretation of the Contract, the CONTRACTOR shall immediately inform the Project Manager. If the matter cannot be resolved by agreement within 7 days, the CONTRACTOR shall, within the next 14 days, submit an "Intent to Claim" in writing to the Project Manager.

The claim, if not resolved, shall be presented to the Project Manager, in writing, within 60 days following receipt of the "Intent to Claim". Receipt of the claim will be acknowledged in writing by the Project Manager.

The CONTRACTOR agrees that unless these written notices are provided, the CONTRACTOR will have no entitlement to additional time or compensation for such act, event or condition. The CONTRACTOR shall in any case continue diligent performance of the Contract.

15.2 Presenting Claim:

The claim shall specifically include the following:

- 15.2.1 The act, event or condition giving rise to the claim.
- 15.2.2 The Contract provisions which apply to the claim and under which relief is provided.
- 15.2.3 The item or items of Contract Work affected and how they are affected.
- 15.2.4 The specific relief requested, including Contract Time if applicable, and the basis upon which it was calculated.

15.3 Claim Validity, Additional Information, and Project Manager's Actions:

The claim, in order to be valid, must not only show that the CONTRACTOR suffered damages or delay but that those conditions were actually a result of the act, event or condition complained of and that the Contract provides entitlement to relief to the CONTRACTOR for such act, event, or condition. The Project Manager reserves the right to make written request to the CONTRACTOR at any time for additional information which the CONTRACTOR may possess relative to the claim. The CONTRACTOR agrees to provide the Project Manager such additional information within 30 days of receipt of such a request. Failure to furnish such additional information may be regarded as a waiver of the claim. The Claim, if not resolved by agreement within 60 days of its receipt, will automatically be forwarded to the Contracting Officer for formal written decision.

15.4 Contracting Officer's Decision:

The CONTRACTOR will be furnished the Contracting Officers decision within the next 90 days, unless additional information is requested by the Contracting Officer. The Contracting Officer's decision is final and conclusive unless fraudulent as to the claim or unless, within 14 days of receipt of the decision, the CONTRACTOR delivers a

written Notice of Appeal to the Appeals Officer. Procedures for appeals and hearings are covered under AS 36.30.625 and AS 36.30.630.

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SECTION 00800
SUPPLEMENTARY CONDITIONS
MODIFICATIONS TO THE GENERAL CONDITIONS
(STATE FUNDED CONTRACTS)

The following supplements modify, change, delete from, add to the "General Conditions of the Construction Contract for Buildings", revised December, 1987 (c) 4/96. Where any article of the General Conditions is modified, or and Paragraph, Subparagraph, or Clause thereof is modified or deleted by these Supplementary Conditions, the unaltered provisions of that Article, Paragraph, Subparagraph, of Clause shall remain in effect.

SC-1-DEFINITIONS

At General Conditions Article 1, add the following definitions:

“APPROVED. ‘Approved’ or ‘Approval’ as used in this contract document shall mean that the Department has received a document, form or submittal from the contractor and that the Department has taken “No exceptions” to the item submitted. Unless the context clearly indicates otherwise, approved or approval shall not mean that the Department approves of the methods or means, or that the item or form submitted meets the requirements of the contract or constitutes acceptance of the Contractor’s work. Where approved or approval means acceptance, then such approval must be set forth in writing and signed by the contracting officer or his designee.

ARCHITECT. Where used in the contract documents, “ARCHITECT” shall mean the DEPARTMENT’S ENGINEER.

ARCHITECT/ENGINEER. Where used in the contract documents, “ARCHITECT/ENGINEER” shall mean the DEPARTMENT’S ENGINEER.

ENGINEER. The DEPARTMENT’S authorized representative of the Contracting Officer, as defined in the DEPARTMENT’S *delegation of authority letter* to be issued after notice-to-proceed, who is responsible for administration of the contract.

EQUIPMENT. All machinery together with the necessary supplies for upkeep and maintenance, and also tools and apparatus necessary for the proper construction and acceptable completion of the work.

FURNISH. To procure, transport, and deliver to the project site materials, labor, or equipment, for installation or use on the project.

INSPECTOR. The Engineer’s authorized representative assigned to make detailed observations relating to contract performance.

INTERIM WORK AUTHORIZATION. A written order by the Engineer initiating changes to the Contract, within its general scope, until a subsequent Change Order is executed.

LABORATORY. The official testing laboratories of the DEPARTMENT or such other laboratories as may be designated by the Engineer or identified in the contract documents.

MATERIALS. Any substances specified for use in the construction of the project.

PRECONSTRUCTION CONFERENCE. A meeting between the CONTRACTOR and the Engineer, and other parties affected by the construction, to discuss the project before the CONTRACTOR begins work.

QUALITY ASSURANCE (QA). Where referred to in the technical specifications (Divisions 2 through

16), Quality Assurance refers to measures to be provided by the CONTRACTOR as specified.

QUALITY CONTROL (QC). Tests and inspections by the CONTRACTOR to insure the acceptability of materials incorporated into the work. QC test reports are used as a basis upon which to determine whether the Work conforms to the requirements of the Contract Documents and to determine its acceptability for payment.

TRAFFIC CONTROL PLAN (TCP). A drawing of one or more specific plans that detail the routing of pedestrian, and/or vehicular traffic through or around a construction area.

UTILITY. The privately, publicly or cooperatively owned lines, facilities and systems for producing, transmitting or distributing communications, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, storm water not connected with highway or street drainage, and other similar commodities, including publicly owned fire and police signal systems, street lighting systems, and railroads which directly or indirectly serve the public or any part thereof. The term "utility" shall also mean the utility company, inclusive of any wholly owned or controlled subsidiary."

At General Conditions Article 1, definition of **Contract Time**, last sentence, Replace "...Final Completion..." with:

"...Substantial Completion...".

At General Conditions Article 1, definition of **Conditions of the Contract**: Delete the text of this definition in its entirety.

At General Conditions Article 1, definition of **Contract Time**: Delete the text of this definition and replace with the following:

"The number of Calendar Days following issuance of Notice-to-Proceed in which the project shall be rendered Substantially Complete, or if specified as a calendar date, the Substantial Completion date specified in the Contract Documents."

At General Conditions Article 1, definition of **Controlling Item**: Delete the text of this definition and replace with the following:

"Any feature of the Work on the critical path of a network schedule."

At General Conditions Article 1, definition of **Defective**: Delete the text of this definition and replace with the following:

"Work that is unsatisfactory, faulty or deficient, or does not conform to the Contract Documents."

At General Conditions Article 1, definition of **Effective Date of the Contract**: Delete the text of this definition in its entirety.

At General Conditions Article 1, definition **Shop Drawings**: Add the following text:

"Where used in the Contract Documents, "Shop Drawings" shall also mean "Submittals"."

At General Conditions Article 1, second paragraph: Delete this paragraph in its entirety and replace with the following:

"The titles and headings of the articles, sections, and subsections herein are intended for convenience of reference."

At General Conditions Article 1, third paragraph starting with "Whenever used in the Specifications....", Delete this paragraph in its entirety.

At General Conditions Article 1, fourth paragraph, last sentence: Revise it to read as follows:

“Words defined in Article 1 are to be interpreted as defined.”

SC-2.1-AUTHORITIES AND LIMITATIONS

At General Conditions Article 2.1.1, delete this paragraph in its entirety and replace with the following:

“The Contracting Officer alone, shall have the power to bind the DEPARTMENT and to exercise the rights, responsibilities, authorities and functions vested in the Contracting Officer by the Contract Documents. The Contracting Officer shall have the right to designate in writing authorized representatives to act for him. Wherever any provision of the Contract Documents specifies an individual or organization, whether governmental or private, to perform any act on behalf of or in the interest of the DEPARTMENT that individual or organization shall be deemed to be the Contracting Officer's authorized representative under this Contract but only to the extent so specified. “

At General Conditions Article 2.1.4 starting with “The term of “Contracting Officer” when used...”, delete this article in its entirety.

SC-2.4-VISITS TO SITE/PLACE OF BUSINESS

At General Conditions Article 2.4, delete this article in its entirety.

SC-4.1-AVAILABILITY OF LANDS

At General Conditions Article 4.1, add the following:

“The CONTRACTOR shall provide all waste and disposal areas, including disposal areas for hazardous or contaminated materials, at no additional cost to the DEPARTMENT.”

SC-4.3-EXPLORATIONS AND REPORTS

At General Conditions Article 4.3, add the following text:

“A copy of the geotechnical reports and addendum that were used in the preparation of these contract documents (See Section 00300 , Information Available to Bidders) is provided to all planholders listed with the DEPARTMENT as General Contractors, and is available to other planholders upon request. While referenced by or provided with the Contract Documents; the recommendations, engineering details, and other information contained in these reports of explorations shall not be construed to supercede or constitute conditions of the Contract Documents.”

SC-4.7-SURVEY CONTROL

At General Conditions Article 4.7, delete the third sentence and substitute the following text:

"Copies of all survey notes shall be provided to the DEPARTMENT at an interval determined by the Project Manager. The Project Manager may request submission on a weekly or longer period at his discretion. Any variations between the Contract Documents and actual field conditions shall be identified in the survey notes."

SC-5.2-BONDS

At General Condition Article 5.2, delete the second, third, fourth, fifth, and sixth paragraphs in their entirety.

SC-5.4.2-INSURANCE REQUIREMENTS, GENERAL

At General Condition Article 5.4.2, revise the first sentence to read as follows:

"The CONTRACTOR shall maintain in force at all times during the performance of the work under this agreement the following policies and minimum limits of liability."

SC-5.4.2a-WORKMANS COMPENSATION INSURANCE

At General Condition Article 5.4.2a, replace paragraph "a" in its entirety and replace it with the following:

- "a. Workers' Compensation Insurance: The Contractor shall provide and maintain, for all employees of the Contractor engaged in work under this contract, Workers' Compensation Insurance as required by AS 23.30.045. The Contractor shall be responsible for Workers' Compensation Insurance for any subcontractor who provides services under this contract, to include:
1. Waiver of subrogation against the State and Employer's Liability Protection in the amount of \$500,000 each accident/\$500,000 each disease.
 2. If the Contractor directly utilizes labor outside of the State of Alaska in the prosecution of the work, "Other States" endorsement shall be required as a condition of the contract.
 3. Whenever the work involves activity on or about navigable waters, the Workers' Compensation policy shall contain a United States Longshoreman's and Harbor Worker's Act endorsement, and when appropriate, a Maritime Employer's Liability (Jones Act) endorsement with a minimum limit of \$1,000,000."

SC-5.4b-COMPREHENSIVE GENERAL LIABILITY INSURANCE

At General Conditions Article 5.4b, delete minimum limits of liability items 1 and 2 in their entirety and substitute the following text:

- "1. If the CONTRACTOR carries a *Comprehensive General Liability* policy, the limits of liability shall not be less than a Combined Single Limit for bodily injury, property damage and Personal Injury Liability of:
- \$1,000,000 each occurrence
\$2,000,00 aggregate
2. If the CONTRACTOR carries a *Commercial General Liability* policy, the limits of liability shall not be less than:

\$1,000,000 each occurrence (Combined Single Limit for bodily injury and property damage)
\$1,000,000 for Personal Injury Liability

\$2,000,000 aggregate for Products-Completed Operations
\$2,000,000 general aggregate

The State of Alaska, DEPARTMENT of Health & Social Services shall be named as an "Additional Insured" under all liability coverages listed above."

SC-5.4.2d-BUILDERS RISK INSURANCE (SUBCONTRACTORS)

At General Condition Article 5.4.2d, revise the last sentence to read as follows:

"Builders Risk Insurance will only be required of subcontractors if so stated in the Supplementary Conditions."

SC-5.4.3-INSURANCE REQUIREMENTS, EVIDENCE OF INSURANCE

At General Conditions Article 5.4.3, delete this subsection and replace with the following:

"In addition to providing the above coverages the Contractor shall, in any contract or agreement with subcontractors performing work, require that all indemnities and waivers of subrogation it obtains, and that any stipulation to be named as an additional insured it obtains, also be extended to waive rights of subrogation against the State of Alaska and to add the State of Alaska as additional named indemnitee and as additional insured.

Evidence of insurance shall be furnished to the Department prior to the award of the contract. Such evidence, executed by the carrier's representative and issued to the Department, shall consist of a certificate of insurance or the policy declaration page with required endorsements attached thereto which denote the type, amount, class of operations covered, effective (and retroactive) dates, and dates of expiration. Acceptance by the Department of deficient evidence does not constitute a waiver of contract requirements.

When a certificate of insurance is furnished, it shall contain the following statement:

"This is to certify that the policies described herein comply with all aspects of the insurance requirements of (Project Name and Number)."

SC-6.6.1-PROGRESS SCHEDULE

At General Condition Article 6.6.1, change the phrase "Within reasonable time prior to the Pre-Construction Conference..." to read:

"Within seven days after the Pre-Construction Conference."

SC-6.6.2-SCHEDULE OF SHOP DRAWINGS AND SCHEDULE OF VALUES

At General Condition Article 6.6.2, change the phrase "Within fifteen days after the date of the Notice To Proceed,..." to read:

"Prior to submitting the CONTRACTOR's first Application for Payment..."

SC-6.9-SUBSTITUTES "OR EQUAL" ITEMS

Add the following article:

"6.9.5 - Substitutions shall be permitted during or after the bid period as allowed and in accordance with Document 00020 - Invitation for Bids, Document 00700 – General Conditions, and Document 01630 - Product Options and Substitutions."

SC-6.13.1-SUBCONTRACT PROVISIONS

At General Condition Article 6.13.1, delete the third sentence and add the following text:

"All subcontracts shall contain provisions for prompt payment, release of retainage, and interest on late payment amounts and retainage as specified in A.S. 36.90.210. Contracts between subcontractors, regardless of tier, must also contain these provisions."

SC-6.27-LOAD RESTRICTIONS

Add new General Conditions Article 6.27 as follows:

"6.27 Load Restrictions

The CONTRACTOR shall comply with all load restrictions as set forth in the "Administrative Permit Manual", and Title 17, Chapter 25, of the Alaska Administrative Code in the hauling of materials on public roads, beyond the limits of the project, and on all public roads within the project limits that are scheduled to remain in use upon completion of the project.

Overload permits may, at the discretion of the State, be issued for travel beyond the project limits for purposes of mobilization and/or demobilization. Issuance of such a permit will not relieve the CONTRACTOR of liability for damage which may result from the moving of equipment.

The operation of equipment of such weight or so loaded as to cause damage to any type of construction will not be permitted. No overloads will be permitted on the base course or surface course under construction. No loads will be permitted on a concrete pavement, base or structure before the expiration of the curing period. The CONTRACTOR shall be responsible for all damage done by his equipment."

SC-7.12-APPLICABLE ALASKA PREFERENCES

At General Condition Article 7.12.2, delete the last portion of the first sentence commencing at the words, "...when the bid documents designate..." and replace with the words:

"...when the bidder designates the use of Alaska products. The Bidder shall complete the Alaska Products Preference Worksheet per its instructions and submit it with the Bid Proposal." Continue with existing second sentence.

SC-7.13-PREFERENTIAL EMPLOYMENT

At General Condition Article 7.13, delete the text of this article in its entirety.

SC-7.14.1-CERTIFIED PAYROLLS

At General Condition Article 7.14.1, add the following text:

"Regardless of project funding source, copies of all certified payrolls supplied to the State DEPARTMENT of Labor by the CONTRACTOR shall be supplied also to the Project Manager upon request, including submittals made by, or on behalf of, subcontractors."

Add General Condition Article 7.14.3, as follows:

“Within three calendar days of award of a construction contract, the CONTRACTOR shall file a “Notice of Work” with the Department of Labor and shall pay all related fees. The Contracting Officer will not issue Notice to Proceed to the CONTRACTOR until such notice and fees have been paid to the Department of Labor. Failure of the CONTRACTOR to file the Notice of Work and pay fees within this timeframe shall not constitute grounds for an extension of contract time or adjustment of contract price.”

SC-7.16-COVENANT AGAINST CONTINGENT FEES

At General Conditions Article 7.16, delete the text of this article in its entirety.

SC-7.17-OFFICIALS NOT TO BENEFIT

At General Conditions Article 7.17, delete the text of this article in its entirety.

SC-7.18-PERSONAL LIABILITY OF PUBLIC OFFICIALS

At General Conditions Article 7.18, delete the text of this article in its entirety.

SC-9.4-CHANGE ORDER

At General Conditions Article 9.4, change the first sentence to read:

“A change in Contract Time, Contract Price, or responsibility may be made for changes within the scope of the Work by Change Order.”

At General Conditions Article 9.4, add the following sentence:

”A Change Order shall be considered executed when it is signed by the DEPARTMENT.”

SC-9.10-INTERIM WORK AUTHORIZATION

At General Conditions Article 9.10, add the following new paragraph:

“9.10 Interim Work Authorization

An Interim Work Authorization may be used to establish a change within the scope of the Work; however, only a Change Order shall establish associated changes in Contract Time and Price. Work authorized by Interim Work Authorization shall be converted to a Change Order. The basis of payment shall be as stated in the Interim Work Authorization, unless it states that the basis of payment has not been established and is to be negotiated, in which case the Cost of the Work shall be documented pursuant to Article 10.4, to establish a basis for negotiating a lump sum price for the Change Order.”

SC-10.3.2-CHANGE ORDER PRICE DETERMINATION FOR LUMP SUM CHANGE ORDERS

At General Conditions Article 10.3.2, Delete this paragraph in its entirety and replace it with the following.

"10.3.2 By mutual acceptance of a lump sum price which includes overhead and profit. The following maximum rates of cost markup (to cover both overhead and profit of the CONTRACTOR) shall be used in the negotiation of a Lump Sum Change Order:

- a. 17% - where a cost is borne directly by prime contractor (first tier contractor).
- b. 10% - where a cost is borne by a subcontractor (lower tier contractor).

Where the cost is borne by a subcontractor acting as a first tier contractor, the allowable overhead and profit markup for lump sum change orders shall not exceed 17%. Any lower tier subcontractors, including the CONTRACTOR in this case, for whom the first tier subcontractor performs the work, shall be allowed an overhead and profit markup that does not exceed 10%.

SC-10.4-COST OF THE WORK

At General Conditions Article 10.4.1, replace the second sentence from the end of the paragraph with the following:

"Such employees shall include manual workers up through the level of foreman but shall not include general foremen, superintendents, and non-manual employees."

At General Conditions Article 10.4.2, replace the first sentence with the following:

"Cost of all materials and equipment furnished and incorporated or consumed in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith."

SC-10.4.5.c-COST OF THE WORK (SUPPLEMENTAL COSTS)

At General Condition Article 10.4.5.c, add the following:

"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 Dataquest, Inc., 1290 Ridder Park Drive, San Jose, CA 95131. 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 cost.

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 DEPARTMENT 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.

Equipment which must be rented or leased specifically for work required under this section shall be authorized in writing by the Project Manager. The CONTRACTOR shall be paid invoice price plus 15%.

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.

Equipment ordered to be on a 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 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-quarter hour for purposes of computing compensation to the CONTRACTOR for equipment utilized under these rates.

The equipment rates as determined above shall be full compensation, including overhead and profit, for providing the 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."

SC-10.11-DISADVANTAGED BUSINESSS ENTERPRISE PROGRAM

At General Conditions Article 10.11, Delete this paragraph in its entirety for this State Funded Contract.

SC-11.3-COMPUTATION OF CONTRACT TIME

At General Condition Article 11.3.1, third sentence, change "...the date of Final Completion..." to:

"...the date of Substantial Completion..."

At General Condition Article 11.3.2, first sentence, change "...the date of Final Completion..." to:

"...the date of Substantial Completion."

Add General Condition Article 11.3.3, to state as follows:

" The Contract Time shall be as stated on form 25D-9, Proposal."

SC-11.8-DELAY DAMAGES

At General Condition Article 11.8, add the following:

“For each calendar day that the work remains incomplete after the expiration of the Contract Time, liquidated damages in the amount of \$500 per calendar day shall be assessed to the CONTRACTOR. If no money is due the CONTRACTOR, the DEPARTMENT shall have the right to recover said sum from the CONTRACTOR, the surety or both. The amount of these deductions is to reimburse the DEPARTMENT for estimated liquidated damages incurred as a result of the CONTRACTOR's failure to complete the work within the time specified. As liquidated damages, such deductions are not to be considered as penalties.

Permitting the CONTRACTOR to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the DEPARTMENT of any of its rights under the Contract.”

SC 12-ONE YEAR CORRECTION PERIOD

At General Condition Article 12.7, in the first sentence, change the phrase “ Final Completion” to:

“Substantial Completion of the relevant portion of the Work...”

SC 13.3-APPLICATION FOR PROGRESS PAYMENT

At General Conditions Article 13.3, revise the last sentence to read as follows:

“Progress payments will be made as the Work progresses on a monthly basis.”

SC 13.13-FINAL COMPLETION AND APPLICATION FOR PAYMENT

At General Conditions Article 13.13, first sentence, delete the following items:

“maintenance and operating instructions
certificates of inspection
marked up record documents”

The preceding items are some of the requirements for Substantial Completion, as addressed in Section 01701.

SC 13.16-CONTRACTOR'S CONTINUING OBLIGATION

At General Condition Article 13.16, add the following paragraph:

“When it is anticipated that restarting, testing, adjusting, or balancing of systems will be required following Final Acceptance and said requirements are noted in Section(s) 01650, such Work shall constitute a continuing obligation under the Contract.”

SC 14.2-DEFAULT OF CONTRACT

At General Conditions Article 4.2, delete this section in its entirety and replace with the following:

“14.2.1 The Contracting Officer may give the contractor and his surety a written Notice to Cure Default if the contractor:

- a. fails to begin work in the time specified,
- b. fails to use sufficient resources to assure prompt completion of the work,
- c. performs the work unsuitably or neglect or refuse to remove and replace rejected materials or work,

-
- d. stops work,
 - e. fails to resume stopped work after receiving notice to do so,
 - f. becomes insolvent (except that if you declare bankruptcy, termination will be under Title 11 US Code 362 and/or 365. Your bankruptcy does not relieve the surety of any obligations to assume the Contract and complete the work in a timely manner.
 - g. Allows any final judgment to stand against him unsatisfied for period of 60 days, or
 - h. Makes an assignment for the benefit of creditors without the consent of the Contracting Officer, or
 - i. Disregards Regulatory Requirements of any public body having jurisdiction, or
 - j. Otherwise violates in any substantial way any provisions of the Contract Documents, or
 - k. fails to comply with Contract minimum wage payments or civil rights requirements, or
 - l. are party to fraud, deception, misrepresentation , or
 - m. for any cause whatsoever, fails to carry on the Work in an acceptable manner.
- 14.2.2 The Notice to Cure Default will detail the conditions determined to be in default, the time within which to cure the default and may, in the Contracting Officer's discretion, specify the actions necessary to cure the default. Failure to cure the delay, neglect or default within the time specified in the Contracting Officer's written notice to cure authorizes the Department to terminate the contract. The Contracting Officer may allow more time to cure than originally stated in the Notice to Cure Default if he deems it to be in the best interests of the Department. The Department will provide you and your surety with a written Notice of Default Termination that details the default and the failure to cure it.
- 14.2.3 If the CONTRACTOR or Surety, within the time specified in the above notice of default, shall not proceed in accordance therewith, then the DEPARTMENT may, upon written notification from the Contracting Officer of the fact of such delay, neglect or default and the CONTRACTOR's failure to comply with such notice, have full power and authority without violating the Contract, to take the prosecution of the Work out of the hands of the CONTRACTOR. The DEPARTMENT may terminate the services of the CONTRACTOR, exclude the CONTRACTOR from the site and take possession of the Work and of all the CONTRACTOR's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by the CONTRACTOR (without liability to the CONTRACTOR for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which the DEPARTMENT has paid the CONTRACTOR but which are stored elsewhere, and finish the Work as the DEPARTMENT may deem expedient. The DEPARTMENT may enter into an agreement for the completion of said Contract according to the terms and provisions thereof, or use such other methods that in the opinion of the Contracting Officer are required for the completion of said Contract in an acceptable manner.
- 14.2.4 The Contracting Officer may, by written notice to the CONTRACTOR and his Surety or his representative, transfer the employment of the Work from the CONTRACTOR to the Surety, or if the CONTRACTOR abandons the Work undertaken under the Contract, the Contracting Officer may, at his option with written notice to the Surety and without any written notice to the CONTRACTOR, transfer the employment for said Work directly to the Surety. The Surety shall submit its plan for completion of the Work, including any contracts or agreements with third parties for such completion, to the DEPARTMENT for Approval prior to beginning completion of the Work. Approval of such contracts shall be in accordance with all applicable requirements and procedures for Approval of subcontracts as stated in the Contract Documents.
- 14.2.5 After the notice of termination is issued, the Department may take over the work and complete it by contract or otherwise and may take possession of and use materials, appliances, equipment or plant on the work site necessary for completing the work.
-

-
- 14.2.6 Rather than taking over the work itself, the Department may transfer the obligation to perform the work from the contractor to your surety. The surety must submit its plan for completion of the work, including any contracts or agreements with third parties for completion, to the Department for approval prior to beginning work. The surety must follow the Contract requirements for approval of subcontracts, except that the limitation on percent of work subcontracted will not apply.
- 14.2.7 On receipt of the transfer notice, the surety must take possession of all materials, tools, and appliances at the work site, employ an appropriate work force, and complete the Contract work, as specified. The Contract specifications and requirements shall remain in effect. However the Department will make subsequent Contract payments directly to the Surety for work performed under the terms of the Contract. You forfeit any right to claim for the same work or any part thereof. You are not entitled to receive any further balance of the amount to be paid under the Contract.
- 14.2.8 Upon receipt of the notice terminating the services of the CONTRACTOR, the Surety shall enter upon the premises and take possession of all materials, tools, and appliances thereon for the purpose of completing the Work included under the Contract and employ by contract or otherwise any person or persons to finish the Work and provide the materials therefor, without termination of the continuing full force and effect of this Contract. In case of such transfer of employment to the Surety, the Surety shall be paid in its own name on estimates covering Work subsequently performed under the terms of the Contract and according to the terms thereof without any right of the CONTRACTOR to make any claim for the same or any part thereof.
- 14.2.9 If the Contract is terminated for default, the CONTRACTOR and the Surety shall be jointly and severally liable for damages for delay as provided by paragraph 11.8, and for the excess cost of completion, and all costs and expenses incurred by the DEPARTMENT in completing the Work or arranging for completion of the Work, including but not limited to costs of assessing the Work to be done, costs associated with advertising, soliciting or negotiating for bids or proposals for completion, and other procurement costs. Following termination the CONTRACTOR shall not be entitled to receive any further balance of the amount to be paid under the Contract until the Work is fully finished and accepted, at which time if the unpaid balance exceeds the amount due the DEPARTMENT and any amounts due to persons for whose benefit the DEPARTMENT has withheld funds, such excess shall be paid by the DEPARTMENT to the CONTRACTOR. If the damages, costs, and expenses due the DEPARTMENT exceed the unpaid balance, the CONTRACTOR and his Surety shall pay the difference.
- 14.2.10 If, after notice of termination of the CONTRACTOR's right to proceed under the provisions of this clause, it is determined for any reason that the CONTRACTOR was not in default under the provisions of this clause, or that the delay was excusable under the provisions of this clause, or that termination was wrongful, the rights and obligations of the parties shall be determined in accordance with the clause providing for convenience termination.

14.3 Rights or Remedies:

Where the CONTRACTOR's services have been so terminated by the DEPARTMENT, the termination will not affect any rights or remedies of the DEPARTMENT against the CONTRACTOR then existing or which may thereafter accrue. Any retention or payment of moneys due the CONTRACTOR by the DEPARTMENT will not release the CONTRACTOR from liability.

14.4 Convenience Termination:

- 14.4.1 The performance of the Work may be terminated by the DEPARTMENT in accordance with this section in whole or in part, whenever, for any reason the Contracting Officer shall determine that such termination is in the best interest of the DEPARTMENT. Any such termination shall be effected by delivery to the CONTRACTOR of a Notice of Termination, specifying termination is for the convenience of the DEPARTMENT the extent to which

performance of Work is terminated, and the date upon which such termination becomes effective.

14.4.2 Immediately upon receipt of a Notice of Termination and except as otherwise directed by the Contracting Officer, the CONTRACTOR shall:

- a. Stop Work on the date and to the extent specified in the Notice of Termination;
- b. Place no further orders or subcontracts for materials, services, or facilities except as may be necessary for completion of such portion of the Work as is not terminated;
- c. Terminate all orders and subcontracts to the extent that they relate to the performance of Work terminated by the Notice of Termination;
- d. With the written Approval of the Contracting Officer, to the extent he may require, settle all outstanding liabilities and all claims arising out of such termination of orders and subcontracts, the cost of which would be reimbursable, in whole, or in part, in accordance with the provisions of the Contract;
- e. Submit to the Contracting Officer a list, certified as to quantity and quality, of any or all items of termination inventory exclusive of items the disposition of which had been directed or authorized by the Contracting Officer;
- f. Transfer to the Contracting Officer the completed or partially completed record drawings, Shop Drawings, information, and other property which, if the Contract had been completed, would be required to be furnished to the DEPARTMENT;
- g. Take such action as may be necessary, or as the Contracting Officer may direct, for the protection and preservation of the property related to the Contract which is in the possession of the CONTRACTOR and in which the DEPARTMENT has or may acquire any interest.

The CONTRACTOR shall proceed immediately with the performance of the above obligations.

14.4.3 When the DEPARTMENT orders termination of the Work effective on a certain date, all Work in place as of that date will be paid for in accordance with Article 13 of the Contract. Materials required for completion and on hand but not incorporated in the Work will be paid for at invoice cost plus 15 % with materials becoming the property of the DEPARTMENT - or the CONTRACTOR may retain title to the materials and be paid an agreed upon lump sum. Materials on order shall be cancelled, and the DEPARTMENT shall pay reasonable factory cancellation charges with the option of taking delivery of the materials in lieu of payment of cancellation charges. The CONTRACTOR shall be paid 10% of the cost, freight not included, of materials cancelled, and direct expenses only for CONTRACTOR chartered freight transport which cannot be cancelled without charges, to the extent that the CONTRACTOR can establish them. The extra costs due to cancellation of bonds and insurance and that part of job start-up and phase-out costs not amortized by the amount of Work accomplished shall be paid by the DEPARTMENT. Charges for loss of profit or consequential damages shall not be recoverable except as provided above.

- a. The following costs are not payable under a termination settlement agreement or Contracting Officer's determination of the termination claim:
 1. Loss of anticipated profits or consequential or compensatory damages
 2. Unabsorbed home office overhead (also termed "General & Administrative Expense") related to ongoing business operations
 3. Bidding and project investigative costs
 4. Direct costs of repairing equipment to render it operable for use on the terminated work

14.4.4 The termination claim shall be submitted promptly, but in no event later than 90 days from the

effective date of termination, unless extensions in writing are granted by the Contracting Officer upon written request of the CONTRACTOR made within the 90 day period. Upon failure of the CONTRACTOR to submit his termination claim within the time allowed, the Contracting Officer 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.

- 14.4.5 The CONTRACTOR and the Contracting Officer may agree upon 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 section. The Contract shall be amended accordingly, and the CONTRACTOR shall be paid the agreed amount.
- 14.4.6 In the event of the failure of the CONTRACTOR and the Contracting Officer to agree in whole or in part, as provided heretofore, as to the amounts with respect to costs to be paid to the CONTRACTOR in connection with the termination of the Work the Contracting Officer shall determine, on the basis of information available to him, the amount, if any, due to the CONTRACTOR by reason of the termination and shall pay to the CONTRACTOR the amount determined as follows:
- a. All costs and expenses reimbursable in accordance with the Contract not previously paid to the CONTRACTOR for the performance of the Work prior to the effective date of the Notice of Termination;
 - b. So far as not included under "a" above, the cost of settling and paying claims arising out of the termination of the Work under subcontracts or orders which are properly chargeable to the terminated portions of the Contract;
 - c. So far as practicable, claims by the contractor for idled or stand-by equipment shall be made as follows: Equipment claims will be reimbursed as follows:
 1. Contractor-owned equipment usage, based on the contractor's ownership and operating costs for each piece of equipment as determined from the contractor's accounting records. Under no circumstance, may the contractor base equipment claims on published rental rates.
 2. Idle or stand-by time for Contractor-owned equipment, based on your internal ownership and depreciation costs. Idle or stand-by equipment time is limited to the actual period of time equipment is idle or on stand-by as a direct result of the termination, not to exceed 30 days. Operating expenses will not be included for payment of idle or stand-by equipment time.
 3. Rented equipment, based on reasonable, actual rental costs. Equipment leased under "capital leases" as defined in Financial Accounting Standard No. 13 will be considered Contractor-owned equipment. Equipment leased from an affiliate, division, subsidiary or other organization under common control with you will be considered Contractor-owned equipment, unless the lessor has an established record of leasing to unaffiliated lessees at competitive rates consistent with the rates you have agreed to pay and no more than forty percent of the lessor's leasing business, measured in dollars, is with organizations affiliated with the lessor.
- 14.4.7 The CONTRACTOR shall have the right of appeal under the DEPARTMENT's claim procedures, as defined in Article 15, for any determination made by the Contracting Officer, except if the CONTRACTOR has failed to submit his claim within the time provided and has failed to request extension of such time, CONTRACTOR shall have no such right of appeal. In arriving at the amount due the CONTRACTOR under this section, there shall be deducted:
- a. All previous payments made to the CONTRACTOR for the performance of Work under the Contract prior to termination;
 - b. Any claim for which the DEPARTMENT may have against the CONTRACTOR;
 - c. 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 section and not otherwise recovered by or credited to the DEPARTMENT; and,

d. All progress payments made to the CONTRACTOR under the provisions of this section.

14.4.8 Where the Work has been terminated by the DEPARTMENT said termination shall not affect or terminate any of the rights of the DEPARTMENT against the CONTRACTOR or his Surety then existing or which may thereafter accrue because of such default. Any retention or payment of monies by the DEPARTMENT due to the CONTRACTOR under the terms of the Contract shall not release the CONTRACTOR or his Surety from liability.

14.4.9 The contractor's termination claim may not include claims that pre dated the notice for termination for convenience. Those claims shall be prosecuted by the contractor under Article 15.

14.4.10 The contractor's termination claim may not exceed the total dollar value of the contract as awarded plus agreed upon change orders less the amounts that have been paid for work completed.

a. Unless otherwise provided for in the Contract Documents, or by applicable statute, the CONTRACTOR, from the effective date of termination and for a period of three years after final settlement under this Contract, shall preserve and make available to the DEPARTMENT at all reasonable times at the office of the CONTRACTOR, all its books, records, documents, and other evidence bearing on the cost and expenses of the CONTRACTOR under his Contract and relating to the Work terminated hereunder.

b. Definitions. In this Subsection 108-1.09, the term "cost" and the term "expense" mean a monetary amount in U.S. Dollars actually incurred by you, actually reflected in your contemporaneously maintained accounting or other financial records and supported by original source documentation.

c. Cost Principles. The Department may use the federal cost principles at 48 CFR §§ 31.201-1 to 31.205-52 (or succeeding cost principles for fixed price contracts) as guidelines in determining allowable costs under this Subsection to the extent they are applicable to construction contracts and consistent with the specifications of this Contract. The provisions of this contract control where they are more restrictive than, or inconsistent with, these federal cost principles."

SC-15-CLAIMS AND DISPUTES

At General Conditions Article 15 – Claims and Disputes, delete this section in its entirety and substitute the following text:

"ARTICLE 15 - CLAIMS FOR ADJUSTMENT AND DISPUTES

15.1 Notification

15.1.1 The CONTRACTOR shall notify the DEPARTMENT in writing as soon as the CONTRACTOR becomes aware of any act or occurrence which may form the basis of a claim for additional compensation or an extension of Contract Time or of any dispute regarding a question of fact or interpretation of the Contract. The DEPARTMENT has no obligation to investigate any fact or occurrence that might form the basis of a claim or to provide any additional compensation or extension of Contract Time unless the CONTRACTOR has notified the DEPARTMENT in writing in a timely manner of all facts the CONTRACTOR believes form the basis for the claim.

15.1.2 If the CONTRACTOR believes that he is entitled to an extension of Contract Time, then the CONTRACTOR must state the contract section on which he basis his extension request, provide the DEPARTMENT with sufficient information to demonstrate that the CONTRACTOR has suffered excusable delay, and show the specific amount of time to which the CONTRACTOR is entitled. The DEPARTMENT will not grant an extension of Contract Time if

the CONTRACTOR does not timely submit revised schedules under **Section 01310**.

- 15.1.3 If the matter is not resolved by agreement within 7 days, the CONTRACTOR shall submit an Intent to Claim, in writing, to the DEPARTMENT within the next 14 days.
- 15.1.4 If the CONTRACTOR believes additional compensation or time is warranted, then he must immediately begin keeping complete, accurate, and specific daily records concerning every detail of the potential claim including actual costs incurred. The CONTRACTOR shall provide the DEPARTMENT access to any such records and furnish the DEPARTMENT copies, if requested. Equipment costs must be based on the CONTRACTOR's internal rates for ownership, depreciation, and operating expenses and not on published rental rates. In computing damages, or costs claimed for a change order, or for any other claim against the Department for additional time, compensation or both, the contractor must prove actual damages based on internal costs for equipment, labor or efficiencies. Total cost, modified total cost or jury verdict forms of presentation of damage claims are not permissible to show damages. Labor inefficiencies must be shown to actually have occurred and can be proven solely based on job records. Theoretical studies are not a permissible means of showing labor inefficiencies. Home office overhead will not be allowed as a component of any claim against the Department.
- 15.1.5 If the claim or dispute is not resolved by the DEPARTMENT, then the CONTRACTOR shall submit a written Claim to the Contracting Officer within 90 days after the CONTRACTOR becomes aware of the basis of the claim or should have known the basis of the claim, whichever is earlier. The Contracting Officer will issue written acknowledge of the receipt of the Claim.
- 15.1.6 The CONTRACTOR waives any right to claim if the DEPARTMENT was not notified properly or afforded the opportunity to inspect conditions or monitor actual costs or if the Claim is not filed on the date required.

15.2 Presenting the Claim

- 15.2.1 The Claim must include all of the following:
 - a. The act, event, or condition the claim is based on
 - b. The Contract provisions which apply to the claim and provide relief
 - c. The item or items of Contract work affected and how they are affected
 - d. The specific relief requested, including Contract Time if applicable, and the basis upon which it was calculated
 - e. A statement certifying that the claim is made in good faith, that the supporting cost and pricing data are accurate and complete to the best of your knowledge and belief, and that the amount requested accurately reflects the Contract adjustment which the CONTRACTOR believes is due.

15.3 Claim Validity, Additional Information, and DEPARTMENT's Action

- 15.3.1 The Claim, in order to be valid, must not only show that the CONTRACTOR suffered damages or delay but that it was caused by the act, event, or condition complained of and that the Contract provides entitlement to relief for such act, event, or condition.
- 15.3.2 The DEPARTMENT can make written request to the CONTRACTOR at any time for additional information relative to the Claim. The CONTRACTOR shall provide the DEPARTMENT the additional information within 30 days of receipt of such a request. Failure to furnish the additional information may be regarded as a waiver of the Claim.

15.4 Contracting Officer's Decision

The CONTRACTOR will be furnished the Contracting Officer's Decision within 90 days, unless the Contracting Officer requests additional information or gives the CONTRACTOR notice that the time for

issuing a decision is being extended for a specified period under AS 36.30.620. The Contracting Officer's decision is final and conclusive unless, within 14 days of receipt of the decision, the CONTRACTOR delivers a Notice of Appeal to the Appeals Officer. Procedures for appeals are covered under AS 36.30.625 and AS 36.30.630.

15.5 Fraud and Misrepresentation in Making Claims

Criminal and Civil penalties authorized under AS 36.30.687 (including, but not limited to, forfeiture of all claimed amounts) may be imposed on the CONTRACTOR if the CONTRACTOR makes or uses a misrepresentation in support of a claim or defraud or attempt to defraud the DEPARTMENT at any stage of prosecuting a claim under this Contract.”

END OF SECTION

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A photograph of two construction workers in safety gear (hard hats, high-visibility vests, and work clothes) working on a construction site. They are positioned behind a large, grey concrete block wall. One worker is wearing a white hard hat and the other an orange one. They are both looking down at the blocks. In the background, an orange excavator is visible, and the ground is uneven and rocky. The title text is overlaid on a yellow and blue banner at the top of the image.

Laborers' & Mechanics' Minimum Rates of Pay

Effective April 1, 2016
Issue 32

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THE STATE
of **ALASKA**
GOVERNOR BILL WALKER

**Department of Labor and
Workforce Development**

Office of the Commissioner

Post Office Box 111149
Juneau, Alaska 99811
Main: 907.465.2700
fax: 907.465-2784

April 1, 2016

TO ALL CONTRACTING AGENCIES:

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

This pamphlet identifies current prevailing wage rates and resident hire classifications for public construction contracts (any construction projects awarded by the State of Alaska or its political subdivisions, such as local governments and certain non-profit organizations). Because these rates may change, this publication is printed in the spring and fall of every year, so please be sure you are using the appropriate rates. The rates published in this edition become effective April 1, 2016.

All projects with a final bid date of April 11, 2016, or later, must pay the prevailing wage rates contained in this pamphlet. As the law now provides, these rates will remain stable during the life of a contract or for 24 calendar months, whichever is shorter. **The 24-month period begins on the date the prime contract is awarded.** Upon expiration of the initial 24-month period, the latest wage rates issued by the department shall become effective for a subsequent 24-month period or until the original contract is completed, whichever occurs first. This process shall be repeated until the original contract is completed.

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

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

For additional copies of this pamphlet, contact the nearest office of the Division of Labor Standards and Safety, Wage and Hour office or the Web address at: <http://labor.state.ak.us/lss/pamp600.htm>

For questions regarding prevailing wage or resident hire requirements, please contact the nearest Wage and Hour office. These offices are listed on Page xi.

Sincerely,

A handwritten signature in black ink, appearing to read "Heidi Drygas".

Heidi Drygas
Commissioner

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

EXCERPTS FROM ALASKA LAW

(The following statute (36.05.005) applies to projects bid on or after October 20, 2011)

Sec. 36.05.005. Applicability.

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

Sec. 36.05.010. Wage rates on public construction.

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

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

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

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

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

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

Sec. 36.05.060. Penalty for violation of this chapter.

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

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

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

Sec. 36.05.080. Failure to pay agreed wages.

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

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

- (a) The state disbursing officer in the case of a state public construction contract and the local fiscal officer in the case of a political subdivision public construction contract shall pay directly to laborers, mechanics, or field surveyors from accrued payments withheld under the terms of the contract the wages due laborers, mechanics, or field surveyors under AS 36.05.070.
- (b) The state disbursing officer or the local fiscal officer shall distribute to all departments of the state government and to all political subdivisions of the state a list giving the names of persons who have disregarded their obligations to employees. A person appearing on this list and a firm, corporation,

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

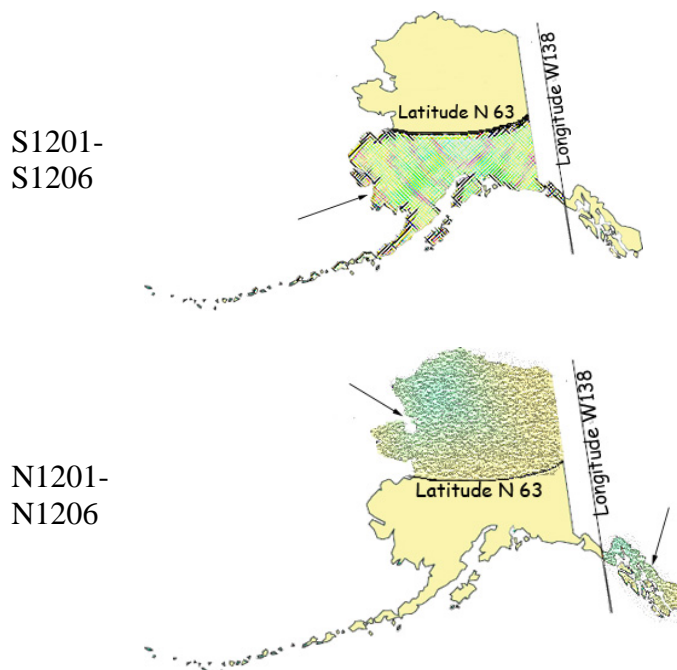
Sec. 36.05.900. Definition.

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

ADDITIONAL INFORMATION

LABORER CLASSIFICATION CLARIFICATION

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



ACCOMMODATIONS AND PER DIEM

The Alaska Department of Labor and Workforce Development has adopted a per diem requirement for blocklayers, bricklayers, carpenters, dredgemen, heat & frost insulators/asbestos workers, ironworkers, laborers, operative plasterers & cement masons, painters, piledrivers, power equipment operators, roofers, surveyors, truck

drivers/surveyors, and tunnel workers. This per diem rate creates an allowable alternative to providing board and lodging under the following conditions:

Employer-Provided Camp or Suitable Accommodations

Unless otherwise approved by the Commissioner, the employer shall ensure that a worker who is employed on a project that is 65 road miles or more from the international airport in either Fairbanks, Juneau or Anchorage or is inaccessible by road in a 2-wheel drive vehicle and who is not a domiciled resident of the locality of the project shall receive meals and lodging. Lodging shall be in accordance with all applicable state and federal laws. In cases where the project site is not road accessible, but the employee can reasonably get to the project worksite from their permanent residence within one hour, the Commissioner may waive these requirements for that employee upon a written request from the employer.

The term “domiciled resident” means a person living within 65 road miles of the project, or in the case of a highway project, the mid-point of the project, for at least 12 consecutive months prior to the award of the project. However, if the employer or person provides sufficient evidence to convince the department that a person has established a permanent residence and an intent to remain indefinitely within the distance to be considered a “domiciled resident,” the employer shall not be required to provide meals and lodging or pay per diem.

Where the employer provides or furnishes board, lodging or any other facility, the cost or amount thereof shall not be considered or included as part of the required prevailing wage basic hourly rate and cannot be applied to meet other fringe benefit requirements. The taxability of employer provided board and lodging shall be determined by the appropriate taxation enforcement authority.

Per Diem

Employers are encouraged to use commercial facilities and lodges; however, when such facilities are not available, per diem in lieu of meals and lodging must be paid at the basic rate of \$75.00 per day, or part thereof, the worker is employed on the project. Per diem shall not be allowed on highway projects west of Livengood on the Elliott Highway, at Mile 0 of the Dalton Highway to the North Slope of Alaska, north of Mile 20 on the Taylor Highway, east of Chicken, Alaska, on the Top of the World Highway and south of Tetlin Junction to the Alaska-Canada border.

The above-listed standards for room and board and per diem only apply to the crafts as identified in Pamphlet 600, *Laborers' and Mechanics' Minimum Rates of Pay*. Other crafts working on public construction projects shall be provided room and board at remote sites based on the department's existing policy guidelines. In the event that a contractor provides lodging facilities, but no meals, the department will accept payment of \$36 per day for meals to meet the per diem requirements.

**** NEW ** APPRENTICE HIRING REQUIREMENTS**

On November 5, 2015, Governor Walker signed Administrative Order No. 278 to help ensure that there is an adequate pool of well-trained Alaskan construction workers to satisfy the industry needs. AO 278 replaced AO 226 and established a 15 percent goal for hiring federally registered apprentices in certain job categories on all public construction projects awarded by the Alaska Department of Transportation and Public Facilities and the Alaska Department of Administration that exceed \$2.5 million. The Order requires the commissioners of DOTPF and DOA to strive to require not less than 15 percent labor hours on a qualified project are performed by federally registered apprentices in the following classifications:

Boilermakers	Elevator Constructors & Mechanics	Plumbers and Pipefitters
Bricklayers	Insulation Workers	Roofers
Carpenters	Ironworkers	Sheetmetal Workers
Cement Masons	Laborers	Surveyors

Culinary Workers
Electricians
Equipment Operators

Mechanics
Millwrights
Painters
Piledriving Occupations

Sprinkler Fitters
Truck Drivers
Tug Boat Workers
Welders

A federally registered apprentice is enrolled in an apprentice training program under 29 U.S.C. 50 and 29 C.F.R. 29.1 – 29.13. Contractors will be expected to file apprentice utilization forms throughout the project or utilize the online certified payroll filing system available on the My Alaska website. A copy of AO 278 may be viewed in its entirety at <http://gov.state.ak.us/admin-orders/278.html> or call any Wage and Hour office to receive a copy.

APPRENTICE RATES

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

FRINGE BENEFIT PLANS

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

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

SPECIAL PREVAILING WAGE RATE DETERMINATION

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

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

Requests made pursuant to the above should be addressed to:

Director
Alaska Department of Labor and Workforce Development
Labor Standards & Safety Division
Wage and Hour Administration
P.O. Box 111149
Juneau, AK 99811-1149
-or-
Email: anchorage.lss-wh@alaska.gov

**LABOR STANDARDS REGULATIONS
NOTICE REQUEST**

If you would like to receive *notices of proposed changes to regulations* for Wage and Hour or Mechanical Inspection, please indicate below the programs for which you are interested in receiving such notices, print your name and email or mailing address in the space provided, and send this page to:

Alaska Department of Labor and Workforce Development
Labor Standards & Safety Division
Wage and Hour Administration
1251 Muldoon Road, Suite 113
Anchorage, AK 99504-2098
Email: anchorage.lss-wh@alaska.gov

For *REGULATIONS* information relating to any of the following:

- ☐ Wage and Hour Title 23 Employment Practices
- ☐ Wage and Hour Title 36 Public Works
- ☐ Employment Agencies
- ☐ Child Labor
- ☐ Employment Preference (Local Hire)
- ☐ Plumbing Code
- ☐ Electrical Code
- ☐ Boiler/Pressure Vessel Construction Code
- ☐ Elevator Code
- ☐ Certificates of Fitness
- ☐ Recreational Devices

Request any of the following *PUBLICATIONS* by checking below:

- | | |
|--|---|
| <input type="checkbox"/> Wage and Hour Title 23 Employment Practices | <input type="checkbox"/> Public Construction Pamphlet |
| <input type="checkbox"/> Minimum Wage & Overtime Poster | <input type="checkbox"/> Public Construction Wage Rates |
| <input type="checkbox"/> Child Labor Poster | <input type="checkbox"/> Child Labor Pamphlet |

PLEASE NOTE: DUE TO INCREASED MAILING AND PRINTING COSTS, ONLY ONE OF EACH PUBLICATION REQUESTED WILL BE MAILED TO YOU. IF YOU WISH TO RECEIVE ADDITIONAL COPIES OR SUBSEQUENT PUBLICATIONS, PLEASE CONTACT OUR OFFICE AT (907) 269-4900.

Name: _____

Mailing Address: _____

Email Address: _____

**DEPARTMENT OF LABOR & WORKFORCE DEVELOPMENT
ALASKA EMPLOYMENT PREFERENCE INFORMATION**

By authority of AS 36.10.150 and 8 AAC 30.064, the Commissioner of Labor and Workforce Development has determined the State of Alaska to be a Zone of Underemployment. A Zone of Underemployment requires that Alaska residents who are eligible under AS 36.10.140 be given a minimum of 90 percent employment preference on public works contracts throughout the state in certain job classifications. **This 90 percent Alaska resident hiring preference applies on a project-by-project, craft-by-craft or occupational basis and must be met each workweek by each contractor/subcontractor in each of the following classifications:**

Boilermakers	Electricians	Laborers	Roofers
Bricklayers	Engineers & Architects	Mechanics	Sheet Metal Workers
Carpenters	Equipment Operators	Millwrights	Surveyors
Cement Masons	Foremen & Supervisors	Painters	Truck Drivers
Culinary Workers	Insulation Workers	Piledriving Occupations	Tug Boat Workers
	Ironworkers	Plumbers & Pipefitters	Welders

This determination became effective July 1, 2015, and remains in effect through June 30, 2017. This determination will be applied to projects with a bid submission deadline on or after July 1, 2015 and to projects previously covered by the 2013 Alaska employment preference determination. This will afford contractors an opportunity to consider the impacts of Alaska resident hire in their bids.

The first person on a certified payroll in any classification is called the "first worker" and is not required to be an Alaskan resident. However, once the contractor adds any more workers in the classification, then all workers in the classification are counted, and the 90 percent calculation is applied to compute the number of required Alaskans to be in compliance. To compute the number of Alaskan residents required in a workweek in a particular classification, multiply the total number of workers in the classification by 90 percent. The result is then rounded down to the nearest whole number to determine the number of Alaskans that must be employed in that classification.

If a worker works in more than one classification during a week, the classification in which they spent the most time would be counted for employment preference purposes. If the time is split evenly between two classifications, the worker is counted in both classifications.

If you have difficulty meeting the 90 percent requirement, an approved waiver must be obtained before a non-Alaska resident is hired who would put the contractor/subcontractor out of compliance (8 AAC 30.081 (e) (f)). The waiver process requires proof of an adequate search for qualified Alaskan workers. Qualified Alaska residents identified through the search must be hired before waivers for non-resident workers may be granted. To apply for a waiver, contact the nearest Wage and Hour Office for instructions.

Here is an example to apply the 90 percent requirement to four boilermaker workers. Multiply four workers by 90% and drop the fraction ($.90 \times 4 = 3.6 - .6 = 3$). The remaining number is the number of Alaskan resident boilermakers required to be in compliance in that particular classification for that week.

The penalties for being out of compliance are serious. AS 36.10.100 (a) states "A contractor who violates a provision of this chapter shall have deducted from amounts due to the contractor under the contract the prevailing wages which should have been paid to a displaced resident and these amounts shall be retained by the contracting agency." If a contractor/subcontractor is found to be out of compliance, penalties accumulate until they come into compliance.

Contractors are responsible for determining residency status. If you have difficulty determining whether a worker is an Alaska resident, you should contact the nearest Wage and Hour Office. Contact Wage and Hour in Anchorage at (907) 269-4900, in Fairbanks at (907) 451-2886, or in Juneau at (907) 465-4842.

Alaska Department of Labor and Workforce Development
Labor Standards & Safety Division
Wage and Hour Administration
Web site: <http://labor.state.ak.us/lss/pamp600.htm>

Anchorage

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

Email:
anchorage.lss-wh@alaska.gov

Juneau

1111 W. 8th Street, Suite 302
Juneau, Alaska 99801
Phone: (907) 465-4842

Email:
juneau.lss-wh@alaska.gov

Fairbanks

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

Email:
fairbanks.lss@alaska.gov

DEBARMENT LIST

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

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

Company Name

Debarment Expires

Bengal Groups, LLC
Mohammed Ali, Individual
Fry’s Services, LLC
John Paul Freie, Individual
Pyramid Audio & Video, Ltd.
Jeffrey P. Schneider, Individual

November 3, 2017
November 3, 2017
November 16, 2017
November 16, 2017
June 19, 2018
June 19, 2018

SPECIAL NOTICE TO BIDDERS

NEW "LITTLE DAVIS BACON ACT" CHANGES FILING PROCESS AND ASSESSES SPECIAL FEES ON PUBLIC WORKS CONSTRUCTION PROJECTS

The news release concerning these changes is at: <http://labor.state.ak.us/news/2003/news03-23.htm>

Governor Sean Parnell signed changes to CSHB 155 into law on July 22, 2011 (effective October 20, 2011), in addition to Governor Murkowski CSHB 155 changes on June 16, 2003 (effective July 2, 2003). The new laws allow contractors working on certain public construction projects to file bi-weekly versus weekly-certified payrolls to the Alaska Department of Labor and Workforce Development (DOLWD), filing requirements **and** it levies filing fees.

- **What does this change accomplish?**

State Funded Projects - Instead of submitting certified payrolls weekly, prime Contractors working on State funded public construction projects are now allowed to file certified payrolls every other week - bi-weekly payroll reports on State funded project shall not contain Social Security Numbers. In conjunction with this statutory change, the DOLWD is revising the certified payroll form. The revised certified payroll form is available at: <http://www.labor.state.ak.us/lss/lssforms.htm>

Federally Funded Projects - Federal weekly payroll filing requirements under 29 CFR 5.5 (a) (3) are not changed by this new law. But, the assessment of a one percent fee based on the estimated value of work performed and of the value of each subcontractor's price now applies (see below).

And, Federal Statute and form 25D-55 still require Social Security Numbers for the certified weekly payroll reports submitted on Federally funded projects.

- **Are there special forms to file and fees to pay?**

Effective October 20, 2011, the prime Contractor working on any public construction project exceeding \$25,000 must file a "Notice of Work" and a "Notice of Completion" form with the DOLWD.

A one percent filing fee will be assessed on contracts with an amount of \$25,000 or more. The fee will be based on the estimated value of work to be performed by the prime contractor, and one percent of the value of each subcontractor's price. The maximum fee is \$5,000.00.

Amounts paid to owner/operators who do not use employees are exempt from the filing fee.

The Contractor must provide to the Contracting Agency a copy of the "Notice of Work" form that has been date stamped as received by the DOL along with confirmation of fee payment before work on the project may commence.

And, the Contractor must file a "Notice of Completion" with the DOLWD when work is completed. The Contracting Agency will not perform the "close-out for final project completion" until notice from the DOLWD that they have processed the Contractors "Notice of Completion" form. The "Notice of Work" and "Notice of Completion" forms are available at: <http://www.labor.state.ak.us/lss/lssforms.htm>

- **What about emergency work and projects bid opened before July 1, 2003?**

There are special provisions for filing the "Notice of Work" and the payment of fees for an emergency response project. Contractors have 14 days after starting work in which to file the "Notice of Work" and pay the fees on an emergency response project.

A prime Contractor under a contract that had a final bid date before July 1, 2003 will not be required to pay a filing fee, regardless of when the work starts.

- **How can I find out more about this new law?**

Contact the Dept. of Labor Workforce and Development, Wage and Hour Administration at:

Juneau	907.465.4842
Anchorage	907.269.4900
Fairbanks	907.451.2886



STATE OF ALASKA
DEPARTMENT OF HEALTH & SOCIAL SERVICES

SECTION 00850
DRAWING INDEX

ARCHITECTURAL - N/A

GENERAL - N/A

ELECTRICAL – Owner supplied

HAZARDOUS MATERIALS ABATEMENT – Owner supplied

MECHANICAL – Owner supplied

ADMINISTRATIVE PROVISIONS

SECTION 01005
ADMINISTRATIVE PROVISIONS

PART I GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Local Conditions
- B. Permits, Fees, and Inspections
- C. Alternates
- D. Preconstruction Meeting
- E. Applications for Payment
- F. Contractor Use of Premises
- G. Owner Occupancy
- H. Owner - Furnished Products
- I. Coordination
- J. Reference Standards

1.02 RELATED REQUIREMENTS

- A. General and Special Conditions

1.03 LOCAL CONDITIONS

- A. Bidders shall familiarize themselves with the Contract Documents and existing conditions, which affect Work, required by the Contract Documents. It will be assumed that bidders have made a personal examination of the jobsite, existing conditions, and documents for prior construction projects associated with this facility made available by the Owner for review by Bidders during the bid period.
- B. Failure to visit the jobsite, to review existing conditions, or to review documents for prior construction projects associated with this facility made available by the Owner for review by Bidders during the bid period will in no way relieve the successful Bidder from the necessity of furnishing any materials or performing any Work that may be required to complete the Work in accordance with the Contract Documents with no additional cost to the Owner.
- C. For building access and for access to the documents for prior construction projects associated with this facility contact:

James Wann, Maintenance Foreman, 261-4338

1.04 PERMITS, FEES, AND INSPECTIONS

- A. Obtain, pay for, and comply with the requirements of all permits, fees, and inspections required by public authorities.
- B. Transmit copies of permit applications, permits received, and public authority inspection reports to the Contracting Officer within three days of making permit

ADMINISTRATIVE PROVISIONS

application or receiving permits or reports.

1.05 ALTERNATES

- A. Alternates will be exercised at the option of Owner as specified on Bid Schedule. Accepted alternates will be indicated on the Contract and included within the conformed Contract Documents.
- B. Coordinate related work and modify surrounding work affected by accepted alternates as required to complete the Work.
- C. Provide all Work as part of the Base Bid except that Work specifically indicated to be provided as part of an alternate.

1.06 PRECONSTRUCTION MEETING

- A. Attend Owner initiated preconstruction meeting.

1.07 APPLICATIONS FOR PAYMENT

- A. Submit two copies of each application under procedures of Section 01027.
- B. Content and Format: That specified for schedule of values in Section 01027.

1.08 CONTRACTOR USE OF PREMISES

- A. Limit use of premises for Work and for construction operations, to allow for Owner occupancy, Work of other Contractors, and public access.
- B. Limit areas of construction operations to those areas requiring renovation only.
- C. Give written notice two weeks in advance of beginning of Work in any Work area.
- D. Do not smoke except in specifically designated smoking areas.
- E. Take reasonable and adequate precautions to protect the Owner's property from damage during execution of Work. Restore any damage to Owner property resulting from execution of Work or replace in a manner satisfactory to the Contracting Officer.
- F. Take reasonable and adequate precautions to protect the Owner's property from damage during execution of Work. Restore any damage to Owner property resulting from execution of Work or replace in a manner satisfactory to the Contracting Officer.
- G. Limit construction activities which generate noise levels in excess of NC=40 in classrooms, NC=50 in office areas, and NC=60 in other areas to between 7 p.m. and 7 a.m. Monday through Friday and all day Saturday and Sunday.
- H. Limit construction access to building to the location indicated. Keep construction access points locked at all times. Contractor will be provided with two sets of keys for construction access points.
- I. Move Owner tools, equipment, shelving, stored materials, etc. as required to

ADMINISTRATIVE PROVISIONS

accomplish Work. Return to original location as soon as possible.

- J. Protect Owner tools, equipment, shelving, stored materials, and equipment, etc. from Work.
- K. In Owner occupied areas:
 - 1. Limit use of premises for Work and for construction operations to between 8:00 a.m. and 5:30 p.m. Monday through Friday. If requested by the Contractor and approved by the Project Manager the Contractor may work on the project outside these hours if the Contractor's activities do not interfere with owner operations.
 - 2. Cover and protect from dust and debris, at the start of each work day, electronic office equipment such as personal computers, computer terminals, facsimile machines, copiers, printers, postage meters, VCRs, monitors, typewriters, etc. Remove protection at the end of each work day.
 - 3. Do not use furniture, such as countertops, desks, filing cabinets, book shelves, and tables as work surfaces or as steps to access Work.
 - 4. At the end of each workday, move back to original location equipment and furniture moved to accommodate Work. Do not move electronic equipment unless absolutely necessary to accomplish Work.
 - 5. At the end of each workday replace ceiling tiles removed to access Work.
 - 6. At the end of each work day, clean work areas, including floors with a vacuum, and remove tools, equipment, and construction material from work areas.
- M. Coordinate temporary shutdowns of any of the existing facilities' mechanical or electrical systems affecting systems in Owner occupied areas with the Contracting Officer. Schedule shutdowns for nights and weekends. Provide a minimum five-day notice.
- N. Existing systems shall be fully operational for intended purpose at the beginning of each Owner workday.

1.09 OWNER OCCUPANCY

- A. The Owner will occupy premises during entire period of construction for the conduct of its normal operations.
- B. Maintain IBC complying access to and through corridors, stairways, and building exits at all times.
- C. Cooperate with Owner to minimize conflict and to facilitate its operations. In case of conflict accept Contracting Officer's direction as final and adjust use of premises accordingly.
- D. Coordinate Work in and use of premises with the Owner

1.10 COORDINATION

ADMINISTRATIVE PROVISIONS

- A. Coordinate Work of the various Sections of Specifications prior to ordering materials and fabrication to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later. Notify Contracting Officer of conflicts between elements prior to installation of any element.
- B. Verify characteristics of elements of interrelated operating equipment are compatible; 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 is indicated diagrammatically on Drawings. Follow routing shown for ducts and conduits as closely as practical. Make piping, duct, and conduit runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- D. In finished areas, unless otherwise indicated, conceal pipes, ducts, and wiring in the construction.
- E. After Owner acceptance of Work, coordinate access to site by various trades for correction of defective Work and Work not in accordance with Contract Documents, to minimize disruption of Owner activities.

1.11 REFERENCE STANDARDS

- A. For products or workmanship specified by association, trades, or regulatory agency standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. Obtain a copy of standards referenced. Maintain a copy at the jobsite during execution of Work to which the standard applies.
- C. The date of the standard is that in effect as of the bid date except when a specific date is specified.

1.12 ONE YEAR CORRECTION PERIOD

- A. If within one year after the date of Final Completion or such longer period of time as may be prescribed by Regulatory Requirements or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work, materials, or products are found to be defective, the Contractor shall promptly, without cost to the Owner and in accordance with the Contracting Officer's written instructions, either correct such defective Work, or, if it has been rejected by the Contracting Officer, remove it from the site and replace it with conforming Work.
- B. If the Contractor does not promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, the Owner may have the defective Work corrected or the rejected Work removed and replaced, and all direct, indirect, and consequential costs of such removal and replacement (including but not limited to fees and charges of engineers, architects, attorneys, and other professionals) will be paid by the Contractor.

ADMINISTRATIVE PROVISIONS

- C. In special circumstances where a particular item of equipment is placed in continuous service for the benefit of the Owner before Substantial Completion of all the Work, the correction period for that item may begin on an earlier date if so provided in the Specifications of by Change Order.
- D. Provisions of this paragraph are not intended to shorten the statute of limitations for bringing an action.

PART 2	PRODUCTS	Not Used
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PART 3	PARTS	Not Used
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END OF SECTION

SECTION 01010
SUMMARY OF WORK

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Basic Bid.
- B. Work by Others.
- C. Hazardous Materials
- D. Work Inside Facility
- E. Work Plans and Access to Facility, Individual Work Areas
- F. Shut Offs/Disruptions to Service
- G. Use of Premises.
- H. Using Agency Occupancy.
- I. Coordination
- J. Parking/Staging

1.02 RELATED REQUIREMENTS

- A. Document 00200 – Information available to bidders.
- B. Document 00700 - General Conditions: Provisions for use of site, and Using Agency occupancy. Relations of CONTRACTOR- Subcontractors.
- C. Document 00800 - Supplementary Conditions: Modifications to General Conditions.
- D. Section 01400 – Quality Control
- E. Section 01540 – Security.

1.03 WORK COVERED BY CONTRACT DOCUMENTS

- A. Work covered by the contract documents is located
- B. The DEPARTMENT is acting for the State of Alaska.

1.04 CONTRACT METHOD

- A. Construct the Work under a single lump sum Contract.

1.05 BASIC BID

- A. That portion of the Work described within these documents (taken as a whole) as the Basic Bid scope. Basic Bid work includes all work shown on the plans and specifications.
- B. Project will be constructed under a general construction contract.

1.06 WORKS BY OTHERS

- A. Cooperate with other Contractors and the DEPARTMENT to minimize conflict with construction operation.

1.07 HAZARDOUS MATERIALS

- A. All light fixtures to be removed shall be treated as positive for containing PCBs unless proven otherwise.

- B. CONTRACTOR to be aware that other hazardous materials may be within the facility. See Section 00700 Article 4.3.

1.08 WORK INSIDE FACILITY

- A. Work within the facility shall be conducted only between the hours of 7:00 am and 4:00 pm, unless specifically approved by the Maintenance Supervisor. Requests for work outside of these hours must be submitted in writing 24 hours in advance.
- B. CONTRACTOR shall not under any circumstances leave tools or equipment unattended within the limits of the project site unless secured in a locked tool storage shed/box or vehicle. CONTRACTOR will be liable for any damages to persons and/or property resulting from unattended tools or equipment.
- C. No firearms or ammunition allowed on the grounds, to include locked vehicles.
- D. The use of powder-activated tools must be approved by the project manager. Request for such tools must be submitted to the Maintenance Supervisor in writing three (3) working days in advance.

1.09 SHUTOFFS / DISRUPTIONS TO SERVICE

- A. Work with the Maintenance Supervisor to schedule disruption for a time, which minimizes impact on facility operations. Provide the Engineer written notification of any disruption to service at least 24 hours in advance of scheduled disruption or shutoff.
- B. Plan work to minimize down time. Work with DEPARTMENT to schedule disruption for a time that minimizes impact on USING AGENCY's operations.
- C. Provide written work plan and schedule for disruptions to service that exceed one hour.
- D. Contractor must provide protection as stated in Municipal Fire Codes and Safety Codes while working on the fire protection system.

1.10 CONTRACTOR'S USE OF PREMISES

- A. Coordinate use of the premises under direction of DEPARTMENT.
- B. Assume full responsibility for protection and safekeeping of products under this Contract.
- C. Assume full responsibility for the protection of the existing facility and contents, from damage due to construction operations.

1.11 USING AGENCY OCCUPANCY

- A. The User Agency will continue operations adjacent to the site during entire construction period. Cooperate with DEPARTMENT in scheduling operations to minimize conflict and to facilitate the User Agency's operations.
- B. CONTRACTOR shall provide Material Safety Data Sheets for all products that may produce unpleasant odors.

1.12 COORDINATION

- A. Coordinate Work of the various elements of the plans to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items installed later.
- B. Verify if characteristics of elements of interrelated operating equipment are compatible; coordinate Work of various trades 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 conduits, as closely as practicable; make runs parallel with lines of building. Utilize spaces efficiently to maximize accessibility for other installations, for maintenance, and for repairs. Coordinate work with existing elements in the building. Do not locate piping, conduit or other products where they will block access to equipment or junction boxes.
 - D. In finished areas except as otherwise shown, conceal pipes, ducts, and wiring in the construction. .
 - E. Execute cutting and patching to integrate elements of Work, provide openings for penetrations of existing surfaces. Seal penetrations through floors, walls, partitions, and ceilings.

1.13 PARKING / STAGING

- A. CONTRACTOR to coordinate staging area with Facility Maintenance Supervisor.
- B. CONTRACTOR may use established facility parking.
- C. CONTRACTOR will be responsible for all additional required storage/staging and parking off site at no charge to the Department.

PART 2 PRODUCTS	Not Used
PART 3 EXECUTION	Not used

END OF SECTION

SECTION 01020
INTENT OF DOCUMENTS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Explanation of intent and terminology of the Construction Documents.

1.02 RELATED REQUIREMENTS

- A. Document 00700 - General Conditions: Article 1 Definitions relating to 'Drawings' and 'Specifications'.
- B. Document 00700 - General Conditions: Article 3 Contract Documents relating to Intent, Amending, and Reuse.

1.03 SPECIFICATION FORMAT AND COMPOSITION

- A. Specifications are divided into Divisions and Sections for the convenience of writing and using. Titles are not intended to imply a particular trade jurisdiction. DEPARTMENT is not bound to define the limits of any subcontract, and will not enter into disputes between the CONTRACTOR and his employees, including Subcontractors.
- B. Pages are numbered independently for each Section, and recorded in the Table of Contents. Section number is shown with the page number at the bottom of each page. The end of each Section of the specifications is ended by "End of Section". It is CONTRACTOR'S responsibility to verify that Contract Documents received for bidding and/or construction are complete in accordance with Table of Contents.
- C. The language employed in the Contract Documents is addressed directly to the CONTRACTOR. Imperative or indicative language is generally employed throughout and requirements expressed are the mandatory responsibility of the CONTRACTOR, even though the work specified may be accomplished by specialty subcontractors engaged by the CONTRACTOR. References to third parties in this regard shall not be interpreted in any way as to relieve the CONTRACTOR of his or her responsibility under this Contract.
- D. These Specifications are of the abbreviated or "streamlined" type, and may include incomplete sentences.
- E. Omissions of words or phrases such as "the CONTRACTOR shall," "in conformity therewith," "shall be," "as noted on the Drawings," "according to the Drawings," "a," "an," "the" and "all" are intentional.
- F. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings.

1.04 DRAWINGS: CONTENT EXPLANATION

- A. Drawings, Dimensions and Measurements.
 - 1. Contract Documents do not purport to describe in detail, absolute and complete construction information. In some instances drawings are diagrammatic.

2. CONTRACTOR shall provide verification of actual site conditions and shall provide complete and operational systems as specified when drawings do not provide full detail.
3. 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.
4. 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.
5. Where the word "similar" occurs on the Drawings, it shall be interpreted in its general sense and not as meaning identical, all details shall be worked out in relation to their location and their connection with other parts of the work.
6. The figured dimensions on the Drawings or notes indicating dimensions shall be used instead of measurements of the Drawings by scale.
7. No scale measurements shall be used as a dimension to work with except on "full size" Drawings not dimensioned.

1.05 COMMON TERMINOLOGY

A. Certain items used generally throughout the Specifications and Drawings are used as follows:

1. Indicated: The term "indicated" is 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", "schedules", and "specified" are used in lieu of "indicate", 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 CONTRACTOR, his Subcontractor or sub-subcontractor for the performance of a particular unit of 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 deliver 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.
5. Guarantee and Warranty: "Warranty" is generally used in conjunction with products manufactured or fabricated away from the Project site, and "guarantee" is generally used in conjunction with units of work which require both products and substantial amounts of labor at the Project site. The resulting difference is that warranties are frequently issued by manufacturers, and guarantees are generally issued by CONTRACTOR and frequently supported (partially) by product warranties from manufacturers.

1.06 CONFLICTS

A. Report any conflicts to Contracting Officer for clarification.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION - 01027
APPLICATIONS FOR PAYMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for preparation and submittal of Applications for Payment.

1.02 RELATED REQUIREMENTS

- A. Document 00510 - Construction Contract - Contract Form 06D-10a and Bid Schedule: Method of Payment and Contract Price and Amounts of Liquidated Damages.
- B. Document 00700 - General Conditions: Progress Payments, and Final Payment.
- C. Section 00800 – Supplementary Conditions to General Conditions of the Construction Contract for Buildings: SC-11.2 and SC-11.8.
- D. Section 01300 - Submittals: Procedures, Schedule of Values .
- E. Section 01700 - Contract Closeout: Closeout Procedures.

1.03 FORMAT

- A. Application for Payment form in format approved by the DEPARTMENT.

1.04 PREPARATION OF APPLICATIONS

- A. Type required information on Application for Payment form approved by DEPARTMENT.
- B. Execute certification by original signature of authorized officer upon each copy of the Application for Payment.
- C. Submit names of individuals authorized to be responsible for information submitted on application for payment.
- D. Indicate breakdown of costs for each item of the Work on accepted schedule of values. Provide dollar value in each column for each line item for portion of Work performed and for stored products.
- E. List each authorized Change Order as an extension on continuation sheet, listing Change Order number and dollar amount as for an original item of Work.
- F. Prepare Application for Final Payment as specified in Section 01700.

1.05 SUBMITTAL PROCEDURES

- A. Submit two copies of each Application for Payment at times stipulated in Contract.
- B. Submit under transmittal letter specified in Section 01300.

1.06 SUBSTANTIATING DATA

- A. When DEPARTMENT requires substantiating information, submit data justifying line item amounts in question.
- B. Substantiating data required under 7.12.3 and 7.12.4 shall be submitted (or updated) when the Application for Payment includes a current request for payment on an item of Work required to include Alaska "agricultural/wood" products.
- C. Provide one copy of data with cover letter for each copy of Application. Show Application number and date, and line item by number and description.

1.07 SUBMITTALS WITH APPLICATION FOR PAYMENT

- A. Submit the following with each Application for Payment.
 - 1. Updated construction schedule as required by Section 01300 - Submittals.
 - 2. Updated Schedule of Values as required by Section 01300 – Submittals: Schedule of Values.
 - 3. The contractor's as-builts will be reviewed prior to approving each application for payment.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01028
CHANGE ORDER PROCEDURES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures for processing Change Orders.

1.02 RELATED REQUIREMENTS

- A. Document 00312 - Bid Schedule: Total amount bid for lump sum items
- B. Document 00510 - Contract Form: Total amount of Contract Price, as awarded
- C. Document 00700 - General Conditions: Governing requirements for changes in the Work, in Contract Price, and Contract Time.
- D. Document 00800 - Supplementary Conditions: Modifications to Document 00700 - General Conditions.
- E. Section 01027 - Applications for Payment.
- F. Section 01300 - Submittals: Construction Progress Schedules, Schedule of Values.
- G. Section 01600 – Material and Equipment: Product Options, Substitutions.
- H. Section 01700 – Contract Closeout: Project Record Documents.

1.03 SUBMITTALS

- A. Submit name of the individual authorized to accept changes, and to be responsible for informing others in CONTRACTOR's employ of changes in the Work.
- B. Change Order Forms will be prepared by the DEPARTMENT.

1.04 DOCUMENTATION OF CHANGE IN CONTRACT PRICE AND CONTRACT TIME

- A. Maintain detailed records of work done on a Cost of the Work plus a Fee basis. Provide full information required for evaluation of proposed changes, and to substantiate costs of changes in the Work. Incomplete or unsubstantiated costs will be disallowed.
- B. CONTRACTOR shall submit a complete, detailed, itemized cost breakdown addressing impact on Contract Time and Contract Price with each proposal.
- C. On request, provide additional data to support computations:
 - 1. Quantities of products, labor, and equipment.
 - 2. Taxes, insurance and bonds.
 - 3. Overhead and profit.

4. Justification for any change in Contract Time.
 5. Credit for deletions from Contract, similarly documented.
- D. Support each claim for additional costs, and for work done on a cost of the Work plus a Fee basis, with additional information:
1. Origin and date of claim.
 2. Dates and times work was performed, and by whom.
 3. Time records and wage rates paid.
 4. Invoices and receipts for products, equipment, and subcontracts, similarly documented.

1.05 PRELIMINARY PROCEDURES

- A. DEPARTMENT may submit a Proposal Request which includes: Detailed description of change with supplementary or revised Drawings and Specifications, the projected time for executing the change, with a stipulation of any overtime work required, and the period of time during which the requested price will be considered valid.
- B. CONTRACTOR may initiate a change by submittal of a request to DEPARTMENT describing the proposed change with a statement of the reason for the change, and the effect on Contract Price and Contract Time with full documentation.

1.06 CONSTRUCTION CHANGE AUTHORIZATION

- A. Shall be in accordance with Article 9 - Changes: in Document 00700 - General Conditions.

1.07 FIXED PRICE CHANGE ORDER

- A. CONTRACTOR shall submit an itemized price proposal in sufficient detail to fully explain the basis for the proposal. Attach invoices and receipts for products, equipment, subcontracts and as requested by the DEPARTMENT. CONTRACTOR and the DEPARTMENT shall then negotiate an equitable price (and time adjustment if appropriate) in good faith. The Change Order will reflect the results of those negotiations. If negotiations break down CONTRACTOR may be directed to perform the work under COST OF THE WORK CHANGE ORDER.

1.08 UNIT PRICE CHANGE ORDER

- A. For pre-determined Unit Prices and quantities, Change Order will be executed on a lump sum basis.
- B. For unit costs or quantities of units of Work which are not predetermined, execute Work under a Directive. Changes in Contract Price or Contract Time will be computed as specified for cost of the Work plus fee via Change Order.

1.09 COST OF THE WORK CHANGE ORDER

- A. CONTRACTOR shall submit documentation required in 1.04 on a daily basis for certification by the Project Manager. Project Manager will indicate by signature that the submitted documentation is acceptable.

- B. After completion of the change and within 14 Calendar Days, unless extended by the Project Manager, the CONTRACTOR shall submit in final form an itemized account with support data of all costs. Support data shall have been certified by the Project Manager, as required above in paragraph A.

1.10 EXECUTION OF CHANGE ORDERS

- A. DEPARTMENT will issue Change Orders for signatures of parties as provided in Conditions of the Contract.

1.11 CORRELATION OF CONTRACTOR SUBMITTALS

- A. Promptly revise Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjust the Contract Price as shown on Change Order.
- B. Promptly revise progress schedules to reflect any change in Contract Time, revise subschedules to adjust times for other items of Work affected by the change, and resubmit.
- C. Promptly enter changes in project record documents.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01040
COORDINATION

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Coordination of Work of Contract.

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Work.
- B. Section 01045 – Cutting and Patching.
- C. Section 01200 – Project Meetings.
- D. Section 01600 – Material and Equipment: Substitutions.
- E. Section 10701 – Contract Closeout Procedures.

1.03 DESCRIPTION

- A. Coordinate scheduling, submittals, and work of the various sections of Specifications to assure efficient and orderly sequence of installation of construction elements, with provisions for accommodating items to be installed later.
- B. Coordinate sequence of Work to accommodate Using Agency occupancy as specified in Section 01005.

1.04 MEETINGS

- A. Coordinate sequence of Work to accommodate Using Agency occupancy as specified in Section 01005.

1.05 COORDINATION OF SUBMITTALS

- A. Schedule and coordinate submittals specified in Section 01300.
- B. Coordinate Work of various sections having interdependent responsibilities for installing connecting to, and placing in service, such equipment.
- C. Coordinated requests for substitutions to assure compatibility of space, of operating elements, and affect on Work of other sections.

1.06 COORDINATION OF SPACE

- A. Coordinate use of Project space and sequence of installation of mechanical and electrical Work which is indicated diagrammatically on Drawings. Follow routings shown for pipes, ducts, and conduits as closely as practicable, with due allowance for available physical space; make runs parallel with lines of building. Utilize space efficiently to maximize accessibility for other installations, for maintenance, and for repairs.
- B. In finished areas, except as otherwise shown, conceal pipes, ducts, and wiring in the construction. Coordinate locations of fixtures and outlets with finish elements.

1.07 COORDINATION OF CONTRACT CLOSEOUT

- A. Coordinate completion and cleanup of Work of separate sections in preparation for Substantial Completion.
- B. After Using Agency occupancy of premises, coordinate access to site by various sections for correction of Defective Work and Work not in accordance with Contract Documents, to minimize disruption of Using Agency activities.
- C. Assemble and coordinate close submittal specified in Section 01701.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01045
CUTTING AND PATCHING

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Requirements and limitations for cutting and patching of Work.

1.02 RELATED REQUIREMENTS

- A. Section 01005 – Administrative Provisions
- B. Section 01010 - Summary of Work.
- C. Section 01600 - Materials and Equipment: Substitutions.
- D. Individual Specifications 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. 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 DEPARTMENT or separate Contractor.
- B. Include in request:
 - 1. Identification of Project and DEPARTMENT's Project number.
 - 2. Location and description of affected Work.
 - 3. Necessity for cutting or alteration.
 - 4. Description of proposed Work, and products to be used.
 - 5. Alternatives to cutting and patching.
 - 6. Effect on Work of DEPARTMENT or separate Contractor.
 - 7. Written permission of affected separate Contractor.
 - 8. Date and time Work will be executed.

PART 2 PRODUCTS

2.01 MATERIALS

- A. Those required for original installation.
- B. For any change in materials, submit request for substitution under provisions of Section 01600.

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 ill-timed Work.
 - 3. Remove and replace non-conforming and Defective Work.
 - 4. Remove samples of installed Work for testing.
 - 5. Provide openings in elements of Work for penetrations of mechanical and electrical Work.

3.02 INSPECTION

- A. Inspect existing conditions, including elements subject to damage or movement during cutting and patching.
- B. Notify the Department immediately of any suspected hazardous materials.
- C. After uncovering, inspect conditions affecting performance of work.
- D. Beginning of cutting or patching means acceptance of existing conditions.

3.03 PREPARATION

- A. Provide supports to assure structural integrity of surroundings; devices and methods to protect other portions of Project from damage.
- B. Provide protection from elements for areas which may be exposed by uncovering Work; maintain excavations 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. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval. Cutting structural reinforcement with heat is strictly forbidden without prior written approval.
- C. Restore Work with new products in accordance with requirements of Contract Documents.
- D. Fit Work tightly to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- E. At penetrations of fire-rated wall, ceiling, or floor construction, completely seal voids with fire-rated material, full thickness of the construction element or in accordance with listed U.L. assembly requirements.
- F. Refinish surfaces to match adjacent finishes. For continuous surfaces, refinish to nearest intersection; for an assembly, refinish entire unit.

END OF SECTION

SECTION 01073
EXPLANATIONS: DRAWINGS AND SPECIFICATIONS

PART 1 GENERAL

1.1 REQUIREMENTS INCLUDED

- A. Explanation of terminology used within the Drawings and Specifications.

1.2 RELATED REQUIREMENTS

- A. Section 01005 - Administrative Provisions
- B. Section 01010 - Summary of Work
- C. Section 01020 - Intent of Documents

1.3 SPECIFICATION FORMAT AND COMPOSITION

- A. Specifications are divided into Divisions and Sections for the convenience of writing and using. Titles are not intended to imply a particular meaning or to fully describe the Work of each Division or Section, and are not an integral part of the text that specifies the requirements. Contracting Officer is not bound to define the limits of any subcontract, and will not enter into disputes between the Contractor and his employees, including subcontractors.
- B. Pages are numbered independently for each Section. Section number is shown with the page number at the bottom of each page. "End of Section" is noted on the last page of each Section. It is Contractor's responsibility to verify that Contract Documents received for bidding and construction are complete in accordance with Table of Contents.
- C. These Specifications are of the abbreviated, or "streamlined" type, and include incomplete sentences.
- D. Omissions of words or phrases such as "the Contractor shall," "in conformity therewith," "shall be," "as noted on the Drawings," "according to the Drawings," "a," "an," "the" and "all" are intentional.
- E. Omitted words or phrases shall be supplied by inference in the same manner as they are when a "note" occurs on the Drawings.

1.4 DRAWINGS: CONTENT EXPLANATION

- 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, 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. No scale measurements shall be used as a dimension.
- E. Provide piping, ductwork, equipment, and accessories indicated on the Drawings unless it is specifically indicated that the piping, ductwork, equipment, or accessory is existing.
- F. Unless otherwise indicated, abbreviations and symbols used in the Drawings and Specifications are intended to have the meaning commonly accepted in the construction industry. Contact the Contracting Officer for definition if any question arises concerning them.
- G. Certain items used generally throughout the Specifications and Drawings are used as follows:
 - 1. Indicated: The term "indicated" is 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", "schedules", and "specified" are used in lieu of "indicate", 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 Contractor, his subcontractor or sub-subcontractor for the performance of a particular unit of 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. Provide: Except to the extent further defined, the term "provide" means to supply and install, complete and ready for the intended use.
 - 4. Furnish: Except as otherwise defined in greater detail, the term "furnish" is used to mean the same as "provide".
 - 5. Guarantee and Warranty: "Warranty" is generally used in conjunction with products manufactured or fabricated away from the Project site, and "guarantee" is generally used in conjunction with units of work which require both products and substantial amounts of labor at the Project site. The resulting difference is that warranties are frequently issued by manufacturers, and guarantees are generally issued by Contractor and frequently supported (partially) by product warranties from manufacturers.
 - 6. Work: Work is the act of, and the result of, performing services, furnishing labor, furnishing and incorporating materials and equipment into the Project and performing other duties and obligations, all as required by the Contract Documents. Such Work, however incremental, shall culminate in the entire completed Project, or the various separately identifiable parts thereof.
 - 7. Contracting Officer: Contracting Officer means Contracting Officer or Contracting Officer's Representative.

1.5 CONFLICTS

- A. Report any conflicts to Contracting Officer for clarification.

McLaughlin Youth Center
Boiler Renovation & Replacement
ANC 17-27C

Section 01073
Explanations: Drawing And Specifications

PART 2 **PRODUCTS**
[Not Used]

PART 3 **EXECUTION**
[Not Used]

END OF SECTION

SECTION 01090
REFERENCE STANDARDS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Quality Assurance.
- B. Applicability of Reference Standards.
- C. Provision of Reference Standards at site.
- D. Acronyms used in Contract Documents for Reference Standards. Source of Reference Standards.

1.02 RELATED REQUIREMENTS

- A. Document 00700 - General Conditions: Paragraph 3.4.2.

1.03 QUALITY ASSURANCE

- A. For products or workmanship specified by association, trade, or Federal Standards, comply with requirements of the standard, except when more rigid requirements are specified or are required by applicable codes.
- B. The date of the standard is that in effect as of the Project Advertisement date, or Effective Date of the Contract when there was no Advertisement, except when a specific date is specified.
- C. When required by an individual Specification section, obtain copy of standard. Maintain copy at site during submittals, planning, and progress of the specific Work, until Final Completion.
- D. Should specified reference standards conflict with Contract Documents, request clarification from the Architect/Engineer before proceeding. Local code requirements, where more stringent than referenced standards, shall govern.
- E. Neither the contractual relationship, duties, nor responsibilities of the parties in Contract nor those of the Architect/Engineer shall be altered by the Contract Documents by mention or inference otherwise in any reference document.

1.04 SCHEDULE OF REFERENCES

AA	Aluminum Association 818 Connecticut Avenue, N.W. Washington, DC 20006
AABC	Associated Air Balance Council 1000 Vermont Avenue, N.W. Washington, DC 20005
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol Street, N.W. Washington, DC 20001
ACI	American Concrete Institute Box 19150 Reford Station Detroit, MI 48219

ADC	Air Diffusion Council 230 North Michigan Avenue Chicago, IL 60601
AGC	Associated General Contractors America 1957 E Street, N.W. Washington, DC 20006
AI	Asphalt Institute Asphalt Institute Building College Park, MD 20740
AITC	American Institute of Timber Construction 333 W. Hampden Avenue Englewood, CO 80110
AISC	American Institute of Steel Construction 400 North Michigan Avenue Eighth Floor Chicago, IL 60611
AISI	American iron and Steel Institute 1000 16th Street, N.W. Washington, DC 20036
AMCA	Air Movement and Control Association 30 West University Drive Arlington Heights, IL 60004
ANSI	American National Standards Institute 1430 Broadway New York, NY 10018
APA	American Plywood Association Box 11700 Tacoma, WA 98411
ARI	Air-Conditioning and Refrigeration Institute 1815 North Fort Myer Drive Arlington, VA 22209
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers 1791 Tullie Circle, N.E. Atlanta, GA 30329
ASME	American Society of Mechanical Engineers 345 East 47th Street New York, NY 10017
ASPA	American Sod Producers Association Association Building Ninth and Minnesota Hastings, NE 68901

ASTM	American Society for Testing and Materials 1916 Race Street Philadelphia, PA 19103
AWWA	American Water Works Association 6666 West Quincy Avenue Denver, CO 80235
AWI	Architectural Woodwork Institute 2310 South Walter Reed Drive Arlington, VA 22206
AWPA	American Wood-Preservers' Association 7735 Old Georgetown Road Bethesda, MD 20014
AWS	American Welding Society 550 LeJeune Road Miami, FL 33135
CDA	Copper Development Association 57th Floor, Chrysler Building 405 Lexington Avenue New York, NY 10174
CLFMI	Chain Link Fence Manufacturers Institute 1101 Connecticut Avenue, N.W. Washington, DC 20036
CRSI	Concrete Reinforcing Steel Institute 933 Plum Grove Road Schaumburg, IL 60195
EJMA	Expansion Joint Manufacturers Association 707 Westchester Avenue White Plains, NY 10604
FGMA	Flat Glass Marketing Association 3310 Harrison White Lakes Professional Building Topeka, KS 66611
FM	Factory Mutual System 1151 Boston-Providence Turnpike Norwood, MA 02062
FS	Federal Specification General Services Administration Specifications and Consumer Information Distribution Section (WFSIS) Washington Navy Yard, Building 197 Washington, DC 20407

GA	Gypsum Association 1603 Orrington Avenue Evanston, IL 60201
IEEE	Institute of Electrical and Electronics Engineers 345 East 47th Street New York, NY 10017
IMIAC	International Masonry Industry All-Weather Council International Masonry Institute 815 15th Street, N.W. Washington, DC 20005
MFMA	Maple Flooring Manufacturers Association 2400 East Devon Suite 205 Des Plaines, IL 60018
MIL	Military Specification Naval Publications and Forms Center 5801 Tabor Avenue Philadelphia, PA 19120
ML/SFA	Metal Lath/Steel Framing Association Metal Manufacturers 221 North LaSalle Street Chicago, IL 60601
NAAMM	National Association of Architectural Metal Manufacturers 221 North LaSalle Street Chicago, IL 60601
NEBB	National Environmental Balancing Bureau 8224 Old Courthouse Road Vienna, VA 22180
NEMA	National Electrical Manufacturers' Association 2101 L Street, N.W. Washington, DC 20037
NFPA	National Fire Protection Association Battery March Park Quincy, MA 02269
NFPA	National Forest Products Association 1619 Massachusetts Avenue, N.W. Washington, DC 20036
NSWMA	National Solid Wastes Management Association 1120 Connecticut Avenue, N.W. Washington, DC 20036
NTMA	National Terrazzo and Mosaic Association 3166 Des Plaines Avenue Des Plaines, IL 60018

PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077
PCI	Prestressed Concrete Institute 201 North Wacker Drive Chicago, IL 60606
PS	Product Standard U.S. Department of Commerce Washington, DC 20203
RIS	Redwood Inspection Service One Lombard Street San Francisco, CA 94111
RCSHSB	Red Cedar Shingle and Handsplit Shake Bureau 515 116th Avenue Bellevue, WA 98004
SDI	Steel Deck Institute Box 3812 St. Louis, MO 63122
SDI	Steel Door Institute 712 Lakewood Center North Cleveland, OH 44107
SIGMA	Sealed Insulating Glass Manufacturers Association 111 East Wacker Drive Chicago, IL 60601
SJI	Steel Joist Institute 1703 Parham Road Suite 204 Richmond, VA 23229
SMACNA	Sheet Metal and Air Conditioning Contractors' National Association 8224 Old Court House Road Vienna, VA 22180
SSPC	Steel Structures Painting Council 4400 Fifth Avenue Pittsburgh, PA 15213
TAS	Technical Aids Series Construction Specifications Institute 601 North Madison Street Alexandria, VA 22314
TCA	Tile Council of America, Inc. Box 326 Princeton, NJ 08540

UL	Underwriters' Laboratories, Inc. 333 Pfingston Road Northbrook, IL 60062
WCLIB	West Cost Lumber Inspection Bureau Box 23145 Portland, OR 97223

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION

SECTION 01120
ALTERATION PROJECT PROCEDURES

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedural requirements.
- B. Rehabilitation and renovation of existing spaces and materials.

1.02 RELATED REQUIREMENTS

- A. Section 01005 - Administrative Provisions
- B. Section 01010 – Summary of Work
- C. Section 01045 - Cutting and Patching

PART 2 PRODUCTS

2.01 PRODUCTS FOR PATCHING AND EXTENDING WORK

- A. New Materials: As specified in individual Specification Sections.
- B. Match existing products and work for patching and extending Work.
- C. Determine type and quality of existing products by inspection and any necessary testing, and workmanship by use of existing as a standard. Presence of a product, finish, or type of Work, requires that patching, extending, or matching shall be performed as necessary to make Work complete and consistent with existing quality and Contract Documents.

PART 3 EXECUTION

3.01 GENERAL

- A. Remove existing work, materials and items as indicated on the Drawings, as required by job site conditions, as scheduled, and as specified herein, to accomplish new Work and alteration in the existing building.
- B. Remove work carefully and only to the extent required for the final Work. Minimize damage to adjacent materials.
- C. When portions of existing conditions are shown, it is not meant to indicate that all existing conditions are shown.
- D. Patch existing surfaces which are made defective in appearance or function by the execution of Work.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools and electric hammers are not permitted.
- F. Conduct all operations with a minimum of noise.
- G. Take reasonable and adequate precautions to protect the Owner's property from

damage during demolition Work, moving of debris, and damage by the elements. Restore any damage to Owner property due to the aforesaid work or replace in a manner satisfactory to the Contracting Officer.

- H. Provide and maintain suitable barricades, shelters, lights, and danger signals during the progress of the Work. Provide barricades meeting the requirements of the applicable building codes. Assume the responsibility of barriers to completion of Contract and remove at completion of Contract.
- I. Locate penetrations to avoid structural members.

3.02 INSPECTION

- A. Verify that demolition is complete, and areas are ready for installation of new Work.
- B. Beginning of restoration Work means acceptance of existing conditions.

3.03 PREPARATION

- A. Plan all work in advance, informing Contracting Officer of procedure and schedule.
- B. Verify existing conditions affecting Work including existing sizes and materials indicated prior to beginning Work or ordering materials that are affected by existing conditions. Notify Contracting Officer of conflicts in writing.
- C. Erect dust-proof partitions where demolition work is in progress and as directed. Such partitions shall remain in place until their removal is directed.
- D. Where openings are to be cut in existing structures, cut such openings with care. Where materials, equipment, frames, etc., are to be removed, remove such items with care to minimize damage to adjacent materials.
- E. Cut, move, or remove items as necessary for access to alterations and renovations Work; replace and restore at completion.
- F. Cut pockets, openings, chases, depressions, etc., to install or allow for installation of materials or equipment.
- G. Remove from site unsuitable material not marked for salvage, such as rotted wood, rusted metals, and deteriorated masonry and concrete; replace materials as specified for finished Work.
- H. Remove from site, including concealed spaces, debris and abandoned items resulting from demolition operations from the site promptly. No accumulation of debris will be permitted.
- I. Prepare surfaces and remove surface finishes to provide for proper installation of new Work and new finishes.
- J. Close openings in exterior surfaces to protect existing work and salvage items from weather and extremes of temperature and humidity. Insulate ductwork and piping to prevent condensation in exposed areas.

3.04 INSTALLATION

- A. Coordinate Work of alterations and renovations to expedite completion and to accommodate Owner occupancy. Remove, cut, and patch Work in a manner to

minimize damage and to provide means of restoring products and finishes to original condition.

- B. Refinish visible existing surfaces to remain in renovated rooms and spaces with a neat transition to adjacent new finishes.
- C. In addition to specified replacement of equipment restore existing mechanical and electrical systems to full operational condition.
- D. Install products as specified in individual Specification Sections.

3.05 TRANSITIONS

- A. Where new Work abuts or aligns with existing, make a smooth and even transition. Patched Work shall match existing adjacent work in texture and appearance.
- B. 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 to Contracting Officer.

3.06 ADJUSTMENTS

- A. Where removal of partitions results in adjacent spaces becoming one, rework floors, walls, and ceilings to a smooth plane without breaks, steps, or bulkheads. Where a change of plane of 1/4 inch or more occurs, submit recommendation for providing a smooth transition for Contracting Officer review.
- B. Trim existing doors as necessary to clear new floor finishes; refinish trimmed areas.
- C. Fit Work at penetrations of surfaces as specified in Sections 01005 and 01045.

3.07 REPAIR OF DAMAGED SURFACES

- A. Patch or replace portions of existing surfaces which are disturbed, damaged, or otherwise made defective in appearance or function by the execution of Work under this Contract. Restore to original condition.
- B. Repair substrate prior to patching finish.

3.08 FINISHES

- A. Finish surfaces as specified in individual Sections.
- B. Finish patches to produce uniform finish and texture over entire area. When finish cannot be matched, refinish entire surface to nearest intersections.

3.09 CLEANING

- A. In addition to cleaning specified in Section 01500, clean Owner occupied areas of Work daily.
- B. After the demolition Work in any area is completed, clean the area before new construction is started.

END OF SECTION

SECTION 01126 - CONTRACTOR'S CERTIFICATION OF SUBCONTRACTS

PART 1 GENERAL

1.1 SECTION INCLUDES

- A. Procedures for preparing, submitting and accepting subcontracts.

1.2 RELATED REQUIREMENTS

- A. Bidding and Contract Requirement Document 00100 - Instructions to Bidders, Requirements of Apparent Low Bidder.
- B. Bidding and Contract Requirement Document 00101 – Supplemental Information to Bidders.
- C. Bidding and Contract Requirement Document 00430 - Subcontractor List
- D. Bidding and Contract Requirement Section 00700 - General Conditions: Article 6.13 - Subcontractors.
- E. Bidding and Contract Requirement Section 00800 – Supplementary Conditions: Paragraph SC-6.13 – Replacing Subcontractors
- F. Section 01300 - Submittals: Submittal Procedures.
- G. Section 01305 – Submittal Register Form.

1.3 SUBMITTALS

- A. Submit under transmittal letter specified in Section 01300 Submittals.
- B. CONTRACTOR shall submit the initial and final Subcontractor Certification Form(s).

1.4 PREPARATION OF CERTIFICATION

- A. CONTRACTOR to prepare and sign certification forms for all subcontractors regardless of subcontract amount (see Section 00700, Paragraph 6.13.1).
- B. Submit certification form to the DEPARTMENT for approval prior to the subcontractor's start of work. Attach additional information to the certification form where required,
- C. Certification Forms: Use only forms provided by the DEPARTMENT.
- D. The DEPARTMENT will reject substitute certification forms.

1.5 CONSIDERATION OF CERTIFICATION

- A. The DEPARTMENT will review each certification form after receipt and within a reasonable period of time, for the following:
 - 1. Completeness, including the attachments.
 - 2. Proper execution (signatures), including the attachments.
 - 3. Contractor restrictions for adding subcontractors, changing subcontractors, and value of contract.
- B. The DEPARTMENT will return any submittals that are incomplete or not properly executed under a transmittal letter denoting the deficiencies found. The CONTRACTOR shall correct and resubmit according to Section 01300 Submittals.
- C. SUBCONTRACTORS NOT APPROVED BY THE DEPARTMENT SHALL NOT BE ALLOWED ON SITE.
- D. The DEPARTMENT will not process payments for work performed by a non-certified subcontractor.

1.6 ACKNOWLEDGEMENT OF CERTIFICATION

- A. Submittals examined by the DEPARTMENT and determined to be complete and properly executed shall be acknowledged as such by the DEPARTMENT on the approval line of the certification form and returned to the CONTRACTOR.

1.7 CHANGES TO APPROVED SUBCONTRACTORS LIST

- A. Deletion or replacement of subcontractors listed on approved form 06D-5, or the addition of subcontractors not listed on approved form 06D-5 shall be in accordance with Bidding and Contract Requirement Document 00101, Supplementary Information to Bidders.


PART 2 PRODUCTS

Not Used

PART 3 EXECUTION

Not Used

END OF SECTION 01126

STATE OF ALASKA Department of Health & Social Services FMS Facilities	SUBCONTRACTOR CERTIFICATION	
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Note: The Contractor shall provide this form for ALL subcontractors working on this project. This form is applicable to all projects, including Small Procurement Contracts, and must be completed in full.

PROJECT: McLaughlin Youth Center Boiler Renovation & Replacement PROJ. #: ANC 17-27C

PRIME CONTRACTOR: _____

Pursuant to the Contract Documents, we hereby stipulate the following concerning the award of Work to the last Subcontractor on the following list:

- | | | | | |
|----|---------------------------------|------|------------------------------|-----------------------------|
| 1. | First Tier Subcontractor: _____ | DBE? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| | Second Tier: _____ | DBE? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| | Third Tier: _____ | DBE? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |
| | Fourth Tier: _____ | DBE? | Yes <input type="checkbox"/> | No <input type="checkbox"/> |

2. Date of Subcontract: _____

3. Amount of Subcontract: \$ _____

4. Scope of Work: _____

5. Are the following documents kept on file by both the Contractor and the Subcontractor (check the appropriate answer)?

EEO-1 Certification (Form 25A304), federally funded projects only	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Contract Minimum Wage Schedule	Yes <input type="checkbox"/>	No <input type="checkbox"/>
Civil Rights Representative (Form 25A302)	Yes <input type="checkbox"/>	No <input type="checkbox"/>

6. Does the Subcontract contain provisions for prompt payment, release of retainage, and interest on late payment and retainage conforming to AS 36.90.210?

Yes ☐ No ☐

7. Does the Subcontract specifically bind the Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the Department and does it contain waiver provisions and termination provisions as required by the Contract Documents?

Yes ☐ No ☐

8. a. Does the Subcontractor have adequate insurance coverages as specified in the Contract Documents?

Yes ☐ No ☐

If not, does the Contractor stipulate that the insurance limits of the Subcontractor are acceptable to the Contractor and that he has notified his insurance carrier of the reduced insurance limits?

Yes ☐ No ☐

b. Does the evidence of insurance certify that the policies described thereon comply with all aspects of the insurance requirements for this project?

Yes ☐ No ☐

PROJECT: McLaughlin Youth Center Boiler Renovation & Replacement **PROJECT #:** ANC 17-27C

Subcontractor Name: _____

c. Does the evidence of insurance list the Department as an "Additional Insured" or "Certificate Holder"?

Yes ☐ No ☐

d. Does the evidence of insurance commit to providing 30 day written notice of cancellation or reduction of any coverage?

Yes ☐ No ☐

e. Insurance Expiration dates:

Comprehensive or Commercial General Liability: _____

Automobile: _____ Workers' Compensation: _____

(Other): _____

9. Copies of the following professional certifications, licenses, and registrations are attached (circle all that apply):

Business License (mandatory)

Contractor License (mandatory)

Land Surveyor's License

Electrical Administrator's License (mandatory for electrical subs)

Mechanical Administrator's License (mandatory for mechanical subs)

Engineer/Architect

Other: _____

10. Exceptions to any of the above are explained as follows: _____

CERTIFICATION (to be completed and signed by PRIME CONTRACTOR): I certify all the above to be true and correct.

CONTRACTOR'S Signature: _____

CONTRACTOR'S Printed Name: _____

CONTRACTOR'S Company: _____

Date: _____

DEPARTMENT'S APPROVAL/DISAPPROVAL

The subject subcontract is **APPROVED**. Nothing in this approval should be construed as relieving the Prime Contractor of the responsibility for complete performance of the work or as a waiver of any right of the Department to reject defective work.

SIGNATURE: _____ **DATE:** _____

Mike Frawley, Contracting Officer

The subject subcontract is **NOT APPROVED** for the following reasons:

SIGNATURE: _____ **DATE:** _____
Project Manager

SECTION 01200
PROJECT MEETINGS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. CONTRACTOR participation in preconstruction conferences.
- B. CONTRACTOR administration of progress meetings.

1.02 RELATED REQUIREMENTS

- A. Document 00120 - Supplementary Instructions to Bidders: Pre-Bid Conference.
- B. Section 01010 – Summary of Work: Coordination.
- C. Section 01300 - Submittals: Construction Progress Schedules, Shop drawings, Product data, and Samples.
- D. Section 01400 - Quality Control.
- E. Section 01700 - Contract Closeout: Project Record Documents, Operation and Maintenance Data.

1.03 PRECONSTRUCTION CONFERENCES.

- A. DEPARTMENT will administer preconstruction conference for execution of Contract and exchange of preliminary submittals and review of administrative procedures.
- B. DEPARTMENT will administer site mobilization conference at Project site for clarification of CONTRACTOR responsibilities in use of site and coordination with Using Agency for occupancy throughout the duration of the work. CONTRACTOR shall provide the detailed written work plan in preparation for this meeting.

1.04 PROGRESS MEETINGS

- A. Contractor shall schedule and administer weekly Project meetings throughout progress of the Work (unless this requirement is waived by the Project Manager), and other meetings as required to coordinate work, and preinstallation conferences.
- B. Attendance: Job superintendent, major Subcontractors and Suppliers; DEPARTMENT and Consultants as appropriate to agenda topics for each meeting.
- C. Minimum Required Agenda: Review of Work progress, status of progress schedule and adjustments thereto, Work anticipated in the next week, delivery schedules, submittals, maintenance of quality standards, pending changes and substitutions, and other items affecting progress of Work.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01230
ALTERNATES

PART 1 GENERAL

1.01 SUMMARY

- A. This Section includes administrative and procedural requirements for alternates.

1.02 DEFINITIONS

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

1.03 PROCEDURES

- A. Coordination: Modify or adjust affected adjacent work as necessary to completely integrate work of the alternate into Project.
 - 1. Include as part of each alternate, miscellaneous devices, accessory objects, and similar items incidental to or required for a complete installation whether or not indicated as part of alternate.
- B. Notification: Immediately following award of the Contract, the owner will notify each party involved, in writing, of the status of each alternate. Indicate if alternates have been accepted, rejected, or deferred for later consideration. Include a complete description of negotiated modifications to alternates.
- C. Execute accepted alternates under the same conditions as other work of the Contract.
- D. Schedule: A Schedule of Alternates is included at the end of this Section. Specification Sections referenced in schedule contain requirements for materials necessary to achieve the work described under each alternate.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.01 SCHEDULE OF ALTERNATES

- A. Not Applicable to this project

END OF SECTION

SECTION 01300
SUBMITTALS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Procedures.
- B. Construction Progress Schedules.
- C. Schedule of Values.
- D. Shop Drawings, Product Data, and Samples.
- E. Field Samples.

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Work.
- B. Section 01027 - Applications for Payment.
- C. Section 01400 - Quality Control: Manufacturers' Field Services, Testing Laboratory Services.
- D. Section 01600 - Material and Equipment: Products List.
- E. Section 01700 - Contract Closeout: Closeout Procedures.

1.03 PROCEDURES

- A. Deliver submittals to DEPARTMENT as directed.
- B. Transmit each item under DEPARTMENT accepted form. Identify Project, CONTRACTOR, Subcontractor, Major Supplier, identify pertinent Drawing sheet and detail number, and Specification section number, as appropriate. Identify deviations from Contract Documents by submitting a DEPARTMENT supplied Substitution Request Form. Provide a minimum of 8 1/2" x 5 1/2" blank space on the front page for CONTRACTOR, and Consultant review stamps.
- C. Submit initial progress schedules and Schedule of Values in five copies in accordance with paragraph SC6.6 of Document 00800 - Supplementary Conditions prior to submitting first Application for Payment. Form and content shall be reviewed by the DEPARTMENT. After review by DEPARTMENT revise and resubmit as required. Submit subsequent updated schedules (10) days prior to each Application for Payment.
- D. Comply with progress schedule for submittals related to Work progress. Coordinate submittal of related items.
- E. After DEPARTMENT review of submittal, revise and resubmit as required, identifying changes made since previous submittal. Provide total number of submittals as required for the first submission, if 6 are required and 4 were returned for revisions, submit 6 again. The DEPARTMENT and Consultants will not return the first or revised copies of rejected submittals for re-use. DO NOT submit partial copies of submittals for incorporation into rejected submittal packages which have been kept by the DEPARTMENT and/or Consultants. Provide COMPLETE copies for each review.
- F. If drawings, product submittals, samples, mock-ups, or other required submittals are incomplete or not properly submitted, the DEPARTMENT will not review the

submittal and will immediately return submittal to CONTRACTOR. DEPARTMENT will review a submittal no more than three times (incomplete or improper submittals count as one). CONTRACTOR shall pay all review costs associated with more than three reviews, unless a resubmittal is required due to new comments addressing previously submitted information.

1.04 CONSTRUCTION PROGRESS SCHEDULES

- A. Submit horizontal bar Gantt chart (see below for electronic version requirements). Schedule shall show:

1. Separate bar for each major trade or operation, identifying the duration of each activity and precedent activities.
2. Complete sequence of construction by activity, identifying Work of separate stages and other logically grouped activities. Show each work plan and separate work area as a separate activity or group of activities.
3. Submittal dates for required for Shop Drawings, product data, and samples, and product delivery dates, including those furnished by DEPARTMENT and those under allowances.
4. All required submittals and indicating the date for each required submittal.
5. Show projected percentages of completion for each item of Work and submittal as of time of each Application for Progress Payment. See below for electronic version requirements.
6. **ELECTRONIC VERSION: REQUIRED FOR ALL PROJECTS WHEN THE ORIGINAL CONTRACT AMOUNT IS EQUAL TO OR GREATER THAN \$500,000.00.** Submit Progress Schedule plotted on paper no larger than 24" x 36" and no smaller than 8 1/2" x 11" from the electronic program. Provide in electronic form on CD for IBM and compatible using Microsoft Project 2000 version 9.0. CD will not be returned by the DEPARTMENT.
7. Submit Progress Schedule percentages in Tracking Gantt form plotted from and in electronic form as stated above.

1.05 SCHEDULE OF VALUES

A. FORMAT

1. Form and content must be acceptable to DEPARTMENT.
2. CONTRACTOR's standard form or media-driven printout will be considered on request.
3. Follow table of contents of Project manual for listing component parts. Identify each line item by number and title of listed Specification sections.

B. CONTENT

1. 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.
2. For each major subcontract, list products and operations of that subcontract as separate line items.
3. Coordinate listings with progress schedule.

4. Component listings shall each include a directly proportional amount of CONTRACTOR's overhead and profit.
5. For items on which payments will be requested for stored products, list sub-values for cost of stored products with taxes paid.
6. Specific line item Values as indicated below shall be minimum acceptable amounts and must be included on all approved Schedules of Values and Applications for Payment.
 - a. **Section 01700 - Contract Closeout. Value of all required Substantial Completion Submittals and Closeout Submittals shall be not less than 10% of the final contracted amount.**
 - b. No progress payments will be made for Substantial Completion Submittals and Closeout Submittals until **all** submittals have been submitted to and accepted by the DEPARTMENT.
7. The sum of values listed shall equal total Contract Price.

C. SUBMITTAL

1. Submit four copies of Schedule prior to submitting the CONTRACTOR's first Application for Payment. Subsequent updated Schedule of Values shall be presented for review ten days prior to each Application for Payment.
2. Transmit under DEPARTMENT accepted form transmittal letter. Identify Project by DEPARTMENT title and Project number; identify Contract by DEPARTMENT Contract number.

D. SUBSTANTIATING DATA

1. When DEPARTMENT requires substantiating information, submit data justifying line item amounts in question.
2. Provide one copy of data with cover letter for each copy of the Application for Payment. Show application number and date, and line item by number and description.

1.06 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

A. SHOP DRAWINGS:

1. Present in a clear and thorough manner. Label each Shop Drawing with DEPARTMENT's Project name and Project number; identify each element of the Shop Drawings by reference to sheet number and detail, schedule, or room number of Contract Documents.
2. Identify field dimensions; show relation to adjacent or critical features or Work or products.
3. Minimum Sheet Size: 8-1/2"x11". Larger sheets may be submitted in multiples of 8-1/2"x11".

B. PRODUCT DATA

1. Submit only pages which are pertinent; mark each copy of standard printed data to identify pertinent products, referenced to Specification section and Article number. Show reference standards, performance characteristics, and capacities; wiring and piping diagrams and controls; component parts; finishes; dimensions; and required clearances.
2. Modify manufacturer's standard schematic drawings and diagrams to supplement

standard information and to provide information specifically applicable to the Work.
Delete information not applicable.

C. SAMPLES

1. Submit full range of manufacturer's standard finishes except when more restrictive requirements are specified, indicating colors, textures, and patterns, for DEPARTMENT selection.
2. Submit samples to illustrate functional characteristics of products, including parts and attachments.
3. Approved samples, which may be used in the Work, are indicated in the Specification section.
4. Label each sample with identification required for transmittal letter.
5. Provide field samples of finishes at Project, at location acceptable to DEPARTMENT, as required by individual Specification section. Install each sample complete and finished. Acceptable finishes in place may be retained in completed Work.

D. MANUFACTURER'S INSTRUCTIONS

1. When required in individual Specification Section, submit manufacturer's printed instructions for delivery, storage, assembly, installation start-up, adjusting, and finishing, in quantities specified for product data.
2. Manufacturer's instructions for storage, preparation, assembly, installation, start-up, adjusting, balancing, and finishing under provisions of Section 01400.

E. CONTRACTOR REVIEW

1. Review submittals prior to transmittal; determine and verify field measurements, field construction criteria, manufacturer's catalog numbers, and conformance of submittal with requirements of Contract Documents.
2. Coordinate submittals with requirements of Work and of Contract Documents.
3. Sign or initial each sheet of Shop Drawings and product data, and each sample label to certify compliance with requirements of Contract Documents. Notify DEPARTMENT in writing at time of submittal, of any deviations from requirements of Contract Documents.
4. Do not fabricate products or begin Work that requires submittals until return of submittal with DEPARTMENT acceptance.

F. SUBMITTAL REQUIREMENTS

1. Each submittal to be numbered by Specification Section and Paragraph. Revisions shall be identified by a hyphen after the paragraph, with a letter designator. Example: 1st submittal "01010 1.08A" 2nd submittal 01010 1.08A - A".
2. Transmit submittals in accordance with the required submittal schedule and in such sequence to avoid delay in the Work.
3. Provide 8 1/2" x 5 1/2" blank space on each submittal for CONTRACTOR and Consultant stamps.
4. Apply CONTRACTOR'S stamp, signed or initialed, certifying to review, verification of products, field dimensions and field construction criteria, and coordination of information with requirements of Work and Contract Documents.
5. Coordinate submittals into logical groupings to facilitate interrelation of the

several items:

- a. Finishes which involve DEPARTMENT selection of colors, textures, or patterns.
 - b. Associated items that require correlation for efficient function or for installation.
6. Submit number of opaque reproductions of shop drawings CONTRACTOR requires, plus six that will be retained by DEPARTMENT.
 7. Submit number of copies of product data and manufacturer's instructions CONTRACTOR requires, plus three copies, which will be retained by DEPARTMENT.
 8. Submit number of samples specified in individual Specifications sections.
 9. Submit under DEPARTMENT accepted transmittal form letter. Identify Project by title and DEPARTMENT Project number; identify Contract by DEPARTMENT contract number. Identify Work and product by Specification section and Article number.
 10. Each submittal shall have as its face document a completed DEPARTMENT furnished Submittal Summary form.
 11. Each submittal shall include the manufacturer's name and address, and supplier's name, address and telephone number.

G. RESUBMITTALS

1. After DEPARTMENT review of submittal, revise and resubmit as required, identifying changes made since previous submittal. Provide total number of submittals as required for the first submission, if 6 are required and 4 were returned for revisions, submit 6 again. The DEPARTMENT and Consultants will not return the first or revised copies of rejected submittals for re-use. DO NOT submit partial copies of submittals for incorporation into rejected submittal packages which have been kept by the DEPARTMENT and/or Consultants. Provide COMPLETE copies for each review.

H. DEPARTMENT REVIEW

1. DEPARTMENT or authorized agent will review Shop Drawings, product data, and samples and return submittals within (14) working days.
2. DEPARTMENT or authorized agent will examine shop drawings for general arrangement, overall dimensions and suitability, and will return to the CONTRACTOR marked as follows;
 - "No Exceptions Taken" - denotes that the submittal generally meets the requirements of the Contract Documents. "No Exceptions Taken" does not indicate a review of the CONTRACTOR's design except for general compliance with the requirements of the Contract Documents.
 - "Make Corrections Noted" - denotes review is conditional on compliance with notes made on the submittal.
 - "Revise and Resubmit" - denotes that revisions are required in the submittal in order for the submittal to be generally consistent with the requirements of the

Contract Documents. Required revisions will be identified to the CONTRACTOR.

- "Rejected" - denotes that the submittal does not meet the requirements of the Contract Documents and shall not be used in the Work. Reasons for rejection will be identified to the CONTRACTOR.

3. Review by the DEPARTMENT of shop and erection drawings shall not be construed as a complete check, but will indicate only that the general method of construction and detailing is consistent with the requirements of the Contract Documents. Review of such drawings shall not relieve the CONTRACTOR of the responsibility for errors, dimensions, and detail design.
4. DEPARTMENT will require submittal of all required color and finish samples in order to approve any on color or finish.

I. DISTRIBUTION

1. Duplicate and distribute reproductions of Shop Drawings, copies of product data, and samples, which bear Consultant's stamp, to job site file, record documents file, Subcontractors, Suppliers, and other entities requiring information.

J. SCHEDULE OF SUBMITTALS

1. Submittal Register Form to be completed by CONTRACTOR and approved by DEPARTMENT prior to submittal of any items.
2. Submit shop drawings, product data and samples as required for each specification section.
3. Format.

a. Submittal schedule form as provided by DEPARTMENT.

1.07 FIELD SAMPLES

- A. Provide field samples of finishes at Project as required by individual Specifications section. Install sample complete and finished. Acceptable samples in place may be retained in completed Work.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01400
QUALITY CONTROL

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. General Quality Control.
- B. Workmanship.
- C. Manufacturer's Instructions.
- D. Manufacturer's Certificates.
- E. Mockups.
- F. Manufacturers' Field Services.
- G. Testing Laboratory Services.
- H. Departmental Inspection Services.

1.02 RELATED REQUIREMENTS

- A. Document 00700 - General Conditions: Inspection and testing required by governing authorities.
- B. Section 01010 – Summary of Work: Work Plans and Access to Facility, Individual Work Areas, and Tests required for inspection of the existing roof deck and structural members.
- C. Section 01090 - Reference Standards: Applicability of Reference Standards.
- D. Section 01300 - Submittals: Shop Drawings, Product Data, and Samples

1.03 QUALITY CONTROL, GENERAL

- A. Maintain quality control over Suppliers, manufacturers, products, services, site conditions, and workmanship, to produce Work of specified quality.

1.04 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 with positive anchorage devices designed and sized to withstand stresses, vibration, and racking.

1.05 MANUFACTURERS' INSTRUCTIONS

- A. Comply with instructions in full detail, including each step in sequence. Should instructions conflict with Contract Documents, request clarification from DEPARTMENT before proceeding.

1.06 MANUFACTURERS' CERTIFICATES

- A. When required by individual Specifications section, submit manufacturer's certificate, in duplicate, that products meet or exceed specified requirements.

1.07 MOCKUPS

- A. When required by individual Specifications section, erect complete, full-scale mockup of assembly at site, perform required tests, and remove mockup at completion, when approved by DEPARTMENT.

1.08 MANUFACTURERS' FIELD SERVICES

- A. When required by manufacturer or when specified in respective Specification sections, require manufacturer to provide qualified personnel to observe field conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust and balance of equipment as applicable, and to make appropriate recommendations.
- B. Require manufacturer's representative to submit written report to DEPARTMENT listing observations and recommendations.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SECTION 01500
CONSTRUCTION FACILITIES AND TEMPORARY CONTROLS

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Electricity, Lighting.
- B. Heat, Ventilation.
- C. Telephone Service.
- D. Water.
- E. Sanitary Facilities.
- F. Dust Control (Exterior).
- G. Construction Enclosures.
- H. Barriers.
- I. Barricades, Warnings, and Markings (Airport Operations).
- J. Protection of Installed Work.
- K. Security.
- L. Water Control.
- M. Cleaning During Construction.
- N. Removal.
- O. Waste Storage Equipment.
- P. Cleaning of the Project Area.
- Q. Disposal.
- R. Tool Control

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Work: Use of Premises.
- B. Section 01010 - Summary of Work: Shutoffs and Disruptions to Service.
- C. Section 01540 - Security.
- D. Section 01700 - Contract Closeout: Final cleaning.

1.03 ELECTRICITY, LIGHTING

- A. Connect to existing service, provide branch wiring and distribution boxes located to allow service and lighting by means of construction-type power cords. DEPARTMENT will pay costs of energy used.
- B. Provide lighting for construction operations.
- C. Take precautions to conserve energy. Wasteful use of power will be back charged to the CONTRACTOR.

1.04 HEAT, VENTILATION

- A. Provide as required to maintain specified conditions for construction operations, to protect materials and finishes from damage due to temperature or humidity.
- B. Do not use permanent facilities for temporary purposes.
- C. Fully exhaust to the outside welding fumes generated from operations related to performance of the Work.
- D. Provide ventilation of enclosed areas to cure materials, to disperse humidity, and to prevent accumulations of dust, fumes, vapors, or gases.

1.05 TELEPHONE SERVICE

- A. Provide telephone service if required for construction operations.

1.06 WATER

- A. Provide service required for construction operations. Extend branch piping with outlets located so that water is available by use of hoses.
- B. The DEPARTMENT will pay for water used.
- C. Hoses or temporary piping will not be permitted in public areas where a hazard to the public may be created.

1.07 SANITARY FACILITIES

- A. Designated existing facilities may be used during construction operation; maintain in clean sanitary condition. Do not use facilities for construction for cleaning of construction equipment.

1.08 DUST CONTROL

- A. Execute Work by methods that minimize raising of dust or airborne debris from construction or demolition operations
- B. Provide positive means to prevent air-borne dust from dispersing into the atmosphere

1.09 CONSTRUCTION ENCLOSURES

- A. Provide temporary enclosures/partitions around areas inside the facility that are affected by the construction. Enclosures/partitions shall:
 - 1. Isolate construction from Using Agency and residents. Enclosure/partitions must be secured with a padlock.
 - 2. Prevent the penetration of dust and/or moisture into occupied areas. Partitions must be sealed at ceiling and floor.
 - 3. Prevent damage to existing materials, finishes, and equipment or other existing building components and contents.
 - 4. Be designed and stamped by an engineer licensed by the State of Alaska if over 12 feet high.
 - 5. Be constructed of metal studs, painted GWB, 10 mil polyethylene, and sound attenuation insulation. Enclosures/Partitions shall extend from floor to ceiling with complete closure at adjoining walls.

- B. The CONTRACTOR shall include his plan for construction enclosures in the work plan prepared under Section 01010.

1.10 BARRIERS

- A. Provide as required to prevent public entry to construction areas and to protect existing facilities and adjacent properties from damage from construction operations.
- B. Provide barriers to provide both separation and safety to adjacent building occupants..

1.11 PROTECTION OF INSTALLED WORK

- A. Provide temporary protection for installed products. Control traffic in immediate area to minimize damage.
- B. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings. Protect finished floors and stairs from traffic, movement of heavy objects, and storage.

1.12 SECURITY.

- A. Provide security program and facilities to protect Work, existing facilities, and Using Agency's operations from unauthorized entry, vandalism, and theft. Coordinate with DEPARTMENT security program.

1.13 WATER CONTROL

- A. Protect the interior of the facility from water and/or moisture infiltration

1.14 CLEANING DURING CONSTRUCTION

- A. In accordance with Part 2 and Part 3 of this specification.

1.15 REMOVAL

- A. Remove temporary materials, equipment, services, and construction prior to Substantial Completion inspection.
- B. Clean and repair damage caused by installation or use of temporary facilities.
- C. Restore existing facilities used during construction to specified, or to original, condition.

PART 2 PRODUCTS

2.01 WASTE STORAGE EQUIPMENT

- A. Provide covered containers for deposit of materials, waste materials, debris, and rubbish.

PART 3 EXECUTION

3.01 CLEANING OF THE PROJECT AREA

- A. Maintain all areas under CONTRACTOR's control free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to closing the space.
- C. Immediately clean interior areas after completion of the work to provide suitable conditions for building occupants and residents. All resident occupied areas and areas used by the general public require cleanup at the end of each shift.

- D. Broom clean interior areas prior to start of surface finishing, and continue cleaning on an as needed basis.
- E. Control cleaning operations so that dust and other particulates will not adhere to wet or newly-coated surfaces.

3.02 DISPOSAL

- A. Promptly remove waste materials, debris, and rubbish from site periodically and dispose of in accordance with all Federal, State and local regulations.

END OF SECTION

SECTION 01540
SECURITY

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Security Check
- B. Facility Liaison
- C. Personnel Access
- D. Contraband
- E. Tool Control

1.02 RELATED REQUIREMENTS

- A. Section 01010 - Summary of Work.
- B. Section 01500 - Construction Facilities and Temporary Controls.

PART 2 PRODUCTS Not Used.

PART 3 EXECUTION

3.01 SECURITY CHECK

- A. All personnel will be required to undergo a security check prior to commencement of work.
- B. The security check will look for recent or frequent past convictions or for outstanding warrants. The Department of Health & Social Services reserves the right to disqualify anyone from access to the work site. A past conviction will not automatically disqualify.

3.02 FACILITY LIAISON

- A. A staff person will be assigned to act as the liaison with the contractor and the facility.
- B. In the event of an emergency affecting the secure operations of the youth facility, the liaison is authorized to direct the contractor to take appropriate action. The directions of the liaison will be followed immediately. This provision supplements Article 6.19 of the General Conditions of the construction contract for facilities.
- C. The liaison shall be briefed each week by the contractor regarding the contractor's work requirements and weekly work plan for the subsequent week.

3.03 PERSONNEL ACCESS

- A. All access to the work site, which is within a youth facility, will be monitored and controlled by the Department of Health & Social Services in order to prevent importation of contraband and escape of residents.
- B. Contractors, subcontractors, and employees may be denied access or be removed from the facility for the following reasons:
 - 1. Contractors or workers that are incompetent, careless or otherwise detrimental to the work or the security of the facility.
 - 2. Security requirements.
 - 3. Disruptive, abrasive, and/or argumentative conduct.

4. Possession or being under the influence of alcohol, drugs and/or any substance that is considered contraband by the facility (including use of tobacco products).
5. Refusal to submit to search of personal property/belongings or themselves.
6. Health problems.
7. Failure to show proper identification.
8. Failure to follow the direction of youth facility officers and/or staff members.
9. Having any contact or interaction with inmates.
10. Failure to pass security check.

3.04 CONTRABAND

- A. The mailing, bartering, introducing, exchanging, or buying of items between residents and contractors or their employees is strictly prohibited without the written consent of the superintendent of the institution.

Title II - Alaska Statutes Section 11.56.375. Promoting contraband in the first degree.

- (1) A person commits the crime of promoting contraband in the first degree if the person violates AS 11.56.380 and the contraband is
 - (2) a deadly weapon;
 - (3) an article that is intended by the defendant to be used as a means of facilitating an escape; or
 - (4) a controlled substance.
- B. Promoting contraband in the first degree is a class C felony

Section 11.56.380. Promoting contraband in the second degree.

- a. A person commits the crime of promoting contraband in the second degree if the person:
- (1) introduces, takes, conveys, or attempts to introduce, take or convey contraband into a facility; or
 - (2) makes, obtains, possesses, or attempts to make, obtain, or possess anything that person knows to be contraband while under official detention within a correctional facility.
- b. Promoting contraband in the second degree is a class A misdemeanor.

Section 11.56.390. Definition.

In AS 11.56.300 - 11.56.390, "contraband" means any article or thing which persons confined in a correctional facility are prohibited by law from obtaining, making, or possessing in that correctional facility.

- C. Contractor is hereby advised that all personnel working at the site will be required to sign a statement that they fully understand sections 3.03 and 3.04 referenced above.

3.05 TOOL CONTROL

- A. Do not leave accessible work areas of the youth facility unattended without first removing or securing all tools and objects which would be considered contraband. Tools will be confiscated and the contractors' personnel responsible will be removed from the site.

3.06 DEPARTMENT OF HEALTH & SOCIAL SERVICES
DIVISION OF JUVENILE JUSTICE YOUTH CORRECTION SECURITY CLEARANCE
PROCEDURES

- A. The following documents pertain to mandatory security background checks for anyone going to work inside a youth detention facility. This is a requirement and the paperwork must be processed prior to anyone going to work at the facility.

The completed forms are to be sent to the following address:

Johnson Youth Center
3252 Hospital Drive
Juneau, AK 99801
ATTN: August Campos, Maintenance Foreman

Phone: (907) 523-6848 / Fax (907) 586-2680

Please direct any questions or comments concerning the security section to Mr. Campos at the referenced phone number.

SECTION 01541
FACILITY KEYS

PART 1 GENERAL Not Used

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

3.01 FACILITY KEY REQUEST

A. Submit written key request on CONTRACTOR company letterhead to the DEPARTMENT a minimum of 5 working days prior to the time key(s) will be needed.

1. Include the following information in the written key request:

- a. List all sub-tier subcontractors between CONTRACTOR and the subcontractor needing access.
- b. Name the person who will carry key on his/her person.
- c. List all door numbers where their access is requested.
- e. Signature of person authorized by Contractor Authorities form to request keys for this project.

3.02 KEY ISSUANCE

A. Keys shall be picked up by the CONTRACTOR authorized representative from the Engineer.

3.03 KEY CONTROL

A. The CONTRACTOR shall maintain a Key Control Log for all requests/issuances/returns of keys for the project.

3.04 KEY RETURNS

A. Return all keys directly to the Engineer.

3.05 LOST KEYS

A. Report all missing keys immediately to the Engineer.

3.06 LOST KEY FEES

A. The fee for changing each lock operated by the lost key shall be \$50 per lock.

END OF SECTION

SECTION 01600
MATERIAL AND EQUIPMENT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Products.
- B. Transportation and Handling.
- C. Storage and Protection.
- D. Product Options.
- E. Products List.
- F. Substitutions.

1.02 RELATED REQUIREMENTS

- A. Section 01005 - Administrative Provisions.
- B. Section 01010 - Summary of Work.
- C. Section 01090 - Reference Standards.
- D. Section 01400 - Quality Control: Manufacturers' Certificates.
- E. Section 01700 – Contract Closeout: Closeout Procedures, Operation and Maintenance Data, Warranties, Spare Parts and Maintenance Materials.

1.03 PRODUCTS

- A. Products include material, equipment, and systems.
- B. Comply with Specifications and referenced standards as minimum requirements.
- C. Components required to be supplied in quantity within a Specification section shall be the same, and shall be interchangeable.
- D. Do not use materials and equipment removed from existing structure, except as specifically required, or allowed, by Contract Documents.

1.04 TRANSPORTATION AND HANDLING

- A. Transport products by methods to avoid product damage; deliver in undamaged condition in manufacturer's unopened containers or packaging, dry.
- B. Provide equipment and personnel to handle products by methods to prevent soiling or damage.
- C. Immediately on delivery, inspect shipment to assure:
 - 1. Product complies with requirements of Contract Documents and reviewed submittals.
 - 2. Quantities are correct.
 - 3. Accessories and installation hardware are correct.
 - 4. Containers and packages are intact and labels legible.
 - 5. Products are protected and undamaged.

1.05 STORAGE AND PROTECTION

- A. **HANDLE AND STORE MATERIALS FOR CONSTRUCTION, PRODUCTS OF DEMOLITION, AND OTHER ITEMS TO AVOID DAMAGE TO BUILDING.**
- B. Store products in accordance with manufacturer's instructions, with seals and labels intact and legible. Store sensitive products in weather-tight enclosures; maintain within temperature and humidity ranges required by manufacturer's instructions.
- C. Arrange storage to provide access for inspection. Periodically inspect to assure products are undamaged, and are maintained under required conditions.
- D. Provide Material Safety Data Sheets (MSDS) for all products which may produce unpleasant or noxious odors. CONTRACTOR shall provide for adequate venting if needed.

1.06 OPTIONS

- A. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards.
- B. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions by meeting product description: Submit a request for substitution for any manufacturer not specifically named that meets the product description specifications.
- C. Products Specified by Naming One or More Manufacturers followed by the term "No Substitutions": Use only specified manufacturers, no substitutions allowed.

1.07 PRODUCTS LIST

- A. Within 7 days after date of Notice to Proceed, transmit four copies of a list of products, which are proposed for installation, including name of manufacturer.
- B. Tabulate products by Specifications section number, title, and Article number
- C. For products specified only by reference standards, give manufacturer, trade name, model or catalog designation, and reference standards.
- D. DEPARTMENT will reply in writing within five days stating whether there is reasonable objection to listed items. Failure to object to a listed item shall not constitute a waiver of requirements of Contract Documents.

1.08 SUBSTITUTIONS

- A. SUBSTITUTION SUBMITTAL PERIOD
 - 1. Product substitution requests will be considered only within 7 days after date established in Notice to Proceed. Subsequent requests will be considered only in case of product unavailability or other conditions beyond control of CONTRACTOR. (Submit on Substitution Request Form "B")
- B. LIMITATIONS ON SUBSTITUTIONS
 - 1. **Only one request for substitution will be considered for each product** from each Prime Bidder/CONTRACTOR. When substitution is not accepted, Prime Bidder/CONTRACTOR shall provide specified product.
 - 2. Substitutions will not be considered when indicated on Shop Drawings or product data submittals.
 - 3. Substitute products shall not be ordered or installed without written acceptance.
 - 4. DEPARTMENT will determine acceptability of substitutions.

C. REQUESTS FOR SUBSTITUTIONS

1. Submit separate request for each substitution. Document each request with complete data substantiating compliance of proposed substitution with requirements of Contract Documents.
2. Identify product by Specification 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.
3. Attach product data as specified in Section 01340.
4. List similar projects using product, dates of installation, and names of design Consultant(s) and owner.
5. Give itemized comparison of proposed substitution with specified product, listing variations, and reference to Specification sections and Article numbers.
6. Give quality and performance comparison between proposed substitution and the specified product.
7. Give cost data comparing proposed substitution with specified product, and amount of net change to Contract Price.
8. List availability of maintenance services and replacement materials.
9. State effect of substitution on construction schedule, and changes required in other Work or products.

D. CONTRACTOR REPRESENTATION

1. 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.
2. CONTRACTOR will provide same warranty for substitution as for specified product.
3. CONTRACTOR will coordinate installation of accepted substitute, making such changes as may be required for Work to be complete in all respects.
4. CONTRACTOR certifies that cost data presented is complete and includes all related costs under this Contract.
5. CONTRACTOR waives claims for additional costs related to substitution which may later become apparent.

E. SUBMITTAL PROCEDURES

1. Submit five copies of complete request for Substitution Request Form. Request to include complete product information and data, color swatch board, and certification that proposed product meets or exceeds all requirements for the specified product.
2. DEPARTMENT will review CONTRACTOR's requests for substitutions within 5 days of receipt.
3. After receipt of submittal, DEPARTMENT will notify CONTRACTOR, in writing, of decision to accept or reject requested substitution within 5 days.
4. For accepted products, submit Shop Drawings, product data, and samples under provisions of Section 01300.

PART 2 PRODUCTS
PART 3 EXECUTION

Not Used
Not Used

END OF SECTION

SECTION 01700
CONTRACT CLOSEOUT

PART 1 GENERAL

1.01 REQUIREMENTS INCLUDED

- A. Closeout Procedures.
- B. Final Cleaning.
- C. Project Record Documents.
- D. Operation and Maintenance Data.
- E. Warranties.
- F. Spare Parts and Maintenance Materials.
- G. Maintenance Service.

1.02 RELATED REQUIREMENTS

- A. Document 00700 - General Conditions: Fiscal provisions, legal submittals, and other administrative requirements.
- B. Section 01010 - Summary of Work: Using Agency Occupancy.
- C. Section 01400 – Quality Control: Departmental Inspection Services.
- D. Section 01500 - Construction Facilities and Temporary Controls: Cleaning during construction.

1.03 CLOSEOUT PROCEDURES

- A. Substantial Completion and Final Completion:
 - 1. Substantial Completion:
 - a. Submit the following prior to requesting a Substantial Completion Inspection:
 - 1. Evidence of Compliance with Requirements of Governing Authorities:
 - I. Certificate of Occupancy.
 - II. Required Certificates of Inspection.
 - 2. Project Record Documents in accordance with sub section 1700-1.05
 - 3. Operation and Maintenance Data in accordance with sub section 1700-1.06
 - 4. Spare Parts and Maintenance Materials in accordance with sub section 1700-1.08
 - b. Substantial Completion shall be considered by the DEPARTMENT when:
 - 1. Written notice is provided 7 days in advance of inspection date.
 - 2. List of items to be completed or corrected is submitted.
 - 3. Operation and Maintenance Manuals are submitted and approved by the DEPARTMENT.
 - 4. Equipment and systems have been tested, adjusted, balanced and are fully operational.
 - 5. Automated and manual controls are fully operational.
 - 6. Operation of system has been demonstrated to DEPARTMENT

Personnel.

7. Certificate of Occupancy is submitted.
 8. Certificates of Inspection for required inspections have been submitted.
 9. Project Record Documents for the Work or the portion of the Work being accepted are submitted and approved.
 10. Spare parts and maintenance materials are turned over to DEPARTMENT.
 11. All keys are turned over to the DEPARTMENT.
- c. Should the DEPARTMENT inspection find Work is not substantially complete, the Department will promptly notify CONTRACTOR in writing, listing observed deficiencies.
 - d. The CONTRACTOR shall remedy deficiencies and send a second written notice of Substantial Completion.
 - e. When the DEPARTMENT finds Work is substantially complete the DEPARTMENT will prepare a certificate of Substantial Completion in accordance with provisions of General Conditions

B. FINAL COMPLETION:

1. When CONTRACTOR considers Work is complete, submit written certification that:
 - a. Contract Documents have been reviewed.
 - b. Work has been inspected for compliance with Contract Documents.
 - c. Work has been completed in accordance with Contract Documents, and deficiencies listed with certificate of Substantial Completion have been corrected.
 - d. Work is complete and ready for final inspection.
2. Should the DEPARTMENT inspection find Work incomplete, DEPARTMENT will promptly notify CONTRACTOR in writing listing observed deficiencies.
3. CONTRACTOR shall remedy deficiencies and send a second certification of Final Completion.
4. When DEPARTMENT finds Work is complete, DEPARTMENT will consider closeout submittals.

C. REINSPECTION FEES

1. Should status of completion of Work require more than two re-inspections by the DEPARTMENT due to failure of Work to comply with CONTRACTOR's responsibility, the DEPARTMENT will deduct the cost of re-inspection from final payment to CONTRACTOR as provided in the Contract Documents.
2. Re-inspection fees shall not exceed \$5,000 for any one re-inspection.

D. CLOSEOUT SUBMITTALS

1. Warranties and Bonds: Under provisions of Section 01700.
2. Evidence of Payment: In accordance with Conditions of the Contract.
3. Consent of Surety to Final Payment.
4. Certificates of Insurance for Products and Completed Operations: In accordance with Supplementary Conditions.
5. Certificate of Release.

E. APPLICATION FOR FINAL PAYMENT

1. Submit application for final payment in accordance with provisions of the General Conditions of the Contract.
- F. Using Agency will occupy Facility for the purpose of conduct of business, under provision stated in certificate of Substantial Completion.
- G. DEPARTMENT will issue a summary Change Order reflecting final adjustments to Contract Price not previously made by Change Order.

1.04 FINAL CLEANING

- A. Execute final cleaning prior to Substantial Completion inspection.
- B. Clean interior and exterior surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces. Clean equipment and fixtures to a sanitary condition, clean or replace filters of mechanical equipment. Clean roofs, gutters, downspouts, and drainage systems.
- C. Clean site; sweep paved areas, rake clean other surfaces.
- D. Use materials which will not create hazards to health or property, and which will not damage surfaces. Follow manufacturers' recommendations.
- E. Maintain cleaning until the DEPARTMENT issues certificate of substantial Completion.
- F. Remove waste, debris, and surplus materials from the site. Clean grounds; remove stains, spills, and foreign substances from paved areas and sweep clean. Rake clean other exterior surfaces.

1.05 PROJECT RECORD DOCUMENTS

- A. Maintain on site, one set of the following Record Documents; record actual revisions to the Work:
 1. Drawings.
 2. Specifications.
 3. Addenda.
 4. Change Orders and other modifications to the Contract.
 5. Reviewed shop drawings, product data, and samples.
 6. Manufacturers instructions for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by DEPARTMENT.
- C. Store Record Documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. SPECIFICATIONS: Legibly mark and record at each product section description of actual products installed, including the following:
 1. Manufacturer's name and product model and number.
 2. Product substitutions or alternates utilized.
 3. Changes made by Addenda and Modifications.
- F. Record Drawings and Shop Drawings: Legibly mark each item to record actual construction graphically to scale including:
 1. Measured depths of foundations in relation to finish first floor datum.

2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent surface improvements.
3. Measured locations of internal utilities and appurtenances concealed in construction, referenced to visible and accessible features of the Work.
4. Field changes of dimension and detail.
5. Details not on original Contract drawings.

1.06 OPERATION AND MAINTENANCE INSTRUCTIONS

- A. Submit data bound in 8-1/2 by 11 inch (A4) text pages, 3-D side ring binders with durable plastic covers.
- B. Prepare binder covers with printed title "OPERATION AND MAINTENANCE INSTRUCTIONS", title of project, and subject matter of binder when multiple binders are requested.
- C. Internally subdivide the binder contents with permanent page dividers, logically organized as described below; with the tab titling clearly printed under reinforced laminated plastic tabs.
- D. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, typed on 24 pound white paper, in 3 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: Operations and maintenance instructions, arranged by system 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 [special] 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. Certificates.
 - c. Originals of warranties and bonds.
- E. Submit one draft copy of completed volumes five working days prior to Substantial Completion inspection. This copy will be reviewed and returned, with DEPARTMENT comments. Revise content of all document sets as required prior to final submission.
- F. Submit two sets of revised final volumes and a digital copy on a CD Rom disc within ten days after Substantial Completion Inspection.

1.07 WARRANTIES

- A. As a condition precedent to Final Payment, all guaranties and warranties as specified under various sections of the Contract Documents shall be obtained by the CONTRACTOR and delivered to the OWNER, in duplicate giving a summary of guarantees attached and stating the

following in respect to each:

1. Character of Work affected.
 2. Name of Subcontractors.
 3. Period of Guarantee.
 4. Conditions of Guarantee.
- B. Delivery of said guarantees and/or warranties shall not relieve the CONTRACTOR from any obligations assumed under any other provision of the Contract.
- C. If, within any guarantee period, repairs or changes are required in connection with the guaranteed Work, which in the opinion of the OWNER is rendered necessary as the result of the use of materials, equipment or workmanship, which are defective, or inferior, or not in accordance with the terms of the Contract, the CONTRACTOR shall, upon receipt of notice from the OWNER, and without expense to the OWNER, proceed within seven (7) calendar days to:
1. Place in satisfactory conditions in every particular all of such guaranteed Work, correct all defects therein, and make good all damages to the structure or site.
 2. Make good all Work or materials, or the equipment and contents of structures or site disturbed in fulfilling any such guarantee.
- D. If the CONTRACTOR, after notice, fails to comply without the terms of the guarantee, the OWNER may have the defects corrected and the CONTRACTOR and CONTRACTOR's Surety shall be liable for all expenses incurred in connection therewith, including Engineer's fees.

1.08 SPARE PARTS AND MAINTENANCE MATERIALS

- A. Provide products, spare parts, maintenance and extra materials in quantities specified in individual Specification Sections.
- B. Deliver to project site and place in location as directed, obtain receipt prior to final payment.

PART 2 PRODUCTS Not Used

PART 3 EXECUTION Not Used

END OF SECTION

SCOPE OF WORK

PROJECT: ANC 17-27C McLaughlin Youth Center – Boiler Renovation and Replacement

FACILITY NAME: McLaughlin Youth Center

PROJECT MANAGER: Mark Moon, DHSS Building Maintenance Specialist

907.269.7812 Mark.Moon@alaska.gov

FACILITY CONTACT: Jim Wann, Maintenance Superintendent

907.261-4338 James.Wann@alaska.gov

ADDRESS: 2600 Providence Dr. Anchorage, Alaska 99508

OVERVIEW: This project will refurbish 2 existing Boilers and replace 1 existing boiler in its entirety. All 3 Boiler will receive new high efficiency modulating burners. A new circulating pump tree will be installed along with various booster pumps located throughout the facility. These boilers are known to contain asbestos and other potentially hazardous materials. The abatement will be included in the scope of this project. A hazardous materials assessment and construction drawings are included as part of the bid documents.

1. Refurbish existing Boilers B-1 & B-2.
2. Replace Boiler B-3 with a high efficiency boiler capable of condensing operation.
3. Replace all Boiler Burners with high efficiency, modulating linkageless burners.
4. Replace the Circulating Pump Tree located in Mechanical room with VFD Pump Set
Demo Existing Pump Sets:
 - (D) CP-1A/B
 - (D) CP-2A/B/C/D
 - (D) CP-3ANew VFD Pump Set:
 - (N) CP-01A/B
5. Replace various Booster Pumps located in Utilidor
Demo Existing Pumps:
 - (D) CP-1/2 (Serves School)
 - (D) CP-4C (Serves Kitchen)
 - (D) CP-2 (Serves Gym)
 - (D) CP-05 (CP-3C Serves Mech Room AHU)New Pumps:
 - (N) CP-02A/B
 - (N) CP-03A/B
 - (N) CP-04A/B
 - (N) CP-05A/B

MCLAUGHLIN YOUTH CENTER

2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508
PDC PROJECT NO. 16377AN / DHSS CONTRACT NO. ANC 17-27C

BOILER RENOVATION AND REPLACEMENT 100% CONSTRUCTION DOCUMENTS FEBRUARY 9, 2017

FOR: DEPARTMENT OF HEALTH & SOCIAL SERVICES

3601 C Street, Suite 578
Anchorage, AK 99503

PREPARED BY:



MECHANICAL ENGINEERING

ELECTRICAL ENGINEERING

SCOPE OF WORK:

- 1. REFURBISH EXISTING BOILERS B-1 & B-2
- 2. REPLACE BOILER B-3 WITH HIGH EFFICIENCY BOILER CAPABLE OF CONDENSING OPERATION
- 3. REPLACE ALL BOILER BURNERS WITH HIGH EFFICIENCY, MODULATING, LINKAGELESS BURNERS
- 4. REPLACE CIRCULATING PUMP TREE LOCATED IN MECH ROOM WITH VFD PUMP SET
 - DEMO EXISTING PUMP SETS:
 - (D) CP-1A/B
 - (D) CP-2A/B/C/D
 - (D) CP-3A
 - NEW VFD PUMP SET:
 - (N) CP-01 A/B
- 5. REPLACE VARIOUS BOOSTER PUMPS LOCATED IN UTILIDOR
 - DEMO EXISTING PUMPS:
 - (D) CP-1/2 (SERVES SCHOOL)
 - (D) CP-4C (SERVES KITCHEN)
 - (D) CP-2 (SERVES GYM)
 - (D) CP-05 (CP-3C, SERVES MECH ROOM AHU)
 - NEW PUMPS:
 - (N) CP-02 A/B
 - (N) CP-03 A/B
 - (N) CP-04 A/B
 - (N) CP-05 A/B

SHEET INDEX

GENERAL

G001 COVER SHEET

MECHANICAL

- M001 LEGENDS AND ABBREVIATIONS
- M002 MECHANICAL SPECIFICATIONS
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- M004 SCHEDULES
- M101 MECHANICAL BOILER ROOM - DEMO
- M201 MECHANICAL BOILER ROOM - REFURBISH
- M202 MECHANICAL - BOOSTER PUMPS
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ELECTRICAL

- E001 LEGEND AND SPECIFICATIONS
- E101 ELECTRICAL PLAN
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GENERAL

DETAIL SYMBOL		DETAIL IDENTIFICATION
SECTION SYMBOL		DRAWING ON WHICH DETAIL IS SHOWN SECTION IDENTIFICATION DRAWING ON WHICH SECTION IS SHOWN
ROOM NAME AND NUMBER DESIGNATION	OFFICE 2	
SHEET NOTE REFERENCE	1	
GENERAL SHEET NOTE	3.	
PLUMBING FIXTURE DESIGNATION, SEE FIXTURE CONNECTION SCHEDULE	P-1	
EQUIPMENT DESIGNATION, SEE EQUIPMENT SCHEDULE	T-1	
TERMINAL HEATING UNIT DESIGNATION	UH-1 83 7.0	EQUIPMENT DESIGNATION GPM LINEAL FEET OR MBH OUTPUT
POINT OF CONNECTION		
VAV TAG	(E)VAV-100	
TO BE DEMOLISHED OR RELOCATED	-----	
EXISTING TO REMAIN	=====	
NEW	=====	

HEATING & COOLING

SUPPLY	
RETURN	
AUTOMATIC AIR VENT W/ ISOLATION VALVE	
UNIT HEATER PLAN VIEW	HORIZONTAL
CABINET UNIT HEATER PLAN VIEW	HORIZONTAL VERTICAL
FINNED TUBE PLAN VIEW	

PIPE FITTINGS & VALVES

ELBOW, TURNED DOWN	
ELBOW, TURNED UP	
TEE, OUTLET DOWN	
TEE, OUTLET UP	
FLOW DIRECTION	
CONCENTRIC REDUCER	
ISOLATION VALVE	
BALL VALVE	
PRESSURE REDUCING VALVE	
CHECK VALVE	
STRAINER	
STRAINER W/ BLOWDOWN	
PRESSURE TEMPERATURE TAP ("PETE'S PLUG")	
AUTOMATIC FLOW CONTROL VALVE	
BALANCE VALVE	
MOTORIZED 2-WAY CONTROL VALVE	
MOTORIZED 3-WAY CONTROL VALVE	
RELIEF OR SAFETY VALVE	
DRAIN ISOLATION VALVE AND HOSE ADAPTOR	
DRAIN ISOLATION VALVE AND CAP	
UNION	
FLANGE CONNECTION	
PIPE ANCHOR	
PIPE GUIDE	
METER	
TRIPLE-DUTY VALVE	
2-WAY TEMPERING VALVE	
3-WAY TEMPERING VALVE	
THERMOMETER	
PRESSURE GAUGE W/ ISOLATION VALVE	
PUMP - CIRC	
PUMP - INLINE	
GAS REGULATOR	

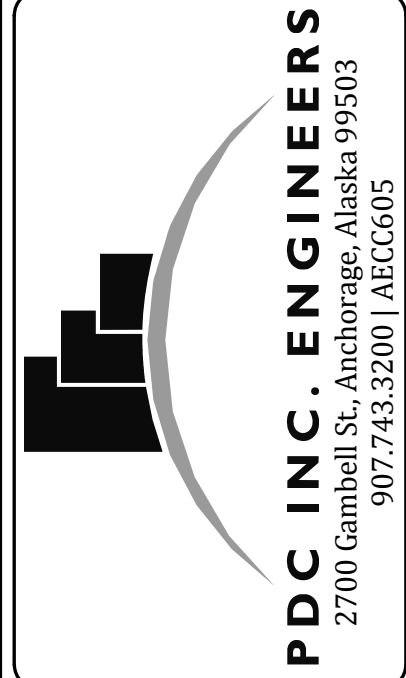
VENTILATION

DUCT (1ST FIGURE, SIDE SHOWN 2ND FIGURE, SIDE NOT SHOWN)	
DIRECTION OF FLOW	
DUCT WITH INSULATION	
DUCT WITH SOUND LINING	
SUPPLY DUCT SECTION	(UP) (DN)
RETURN DUCT SECTION	(UP) (DN)
EXHAUST DUCT SECTION	(UP) (DN)
SUPPLY REGISTER, GRILLE, OR DIFFUSER	
RETURN REGISTER, GRILLE, OR DIFFUSER	
EXHAUST REGISTER, GRILLE OR DIFFUSER	
FLEXIBLE CONNECTIONS	
VOLUME DAMPER	
FIRE DAMPER SMOKE DAMPER COMBINATION FIRE/SMOKE DAMPER	
TURNING VANES	
DUCT SMOKE DETECTOR	
VAV BOX	
CARBON MONOXIDE	
CARBON DIOXIDE	
PRESSURE SENSOR	
TEMPERATURE SENSOR	
HUMIDITY SENSOR	

ABBREVIATIONS

ACFM	ACTUAL CUBIC FEET PER	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MBH	THOUSAND BTU's PER HOUR
AGT	AVERAGE GLYCOL TEMPERATURE	MIN	MINIMUM
AHAP	AS HIGH AS POSSIBLE	MISC	MISCELLANEOUS
AHU	AIR HANDLING UNIT	MU	BOILER MAKE-UP WATER
APPROX	APPROXIMATE	NC	NORMALLY CLOSED
AS	AIR SEPARATOR	NG	NATURAL GAS
BTU	BRITISH THERMAL UNIT	NO	NORMALLY OPEN
CFM	CUBIC FEET PER MINUTE	NO.	NUMBER
CIRC	CIRCULATION	NPCW	NON POTABLE COLD WATER
CLNG	CEILING	O2	OXYGEN
CO	CARBON MONOXIDE	OA	OUTSIDE AIR
CO2	CARBON DIOXIDE	OC	ON CENTER
CONT	CONTINUATION, CONTINUED	ORD	OVERFLOW ROOF DRAIN
CP	CIRCULATING PUMP	ORL	OVERFLOW RAIN LEADER
CR	CONDENSATE RETURN	ORL	OUTSIDE AIR SUPPLY
CU	COPPER	P	PUMP
CW	COLD WATER	PCR	PUMPED CONDENSATE RETURN
CWR	CHILLED WATER RETURN	PD	PRESSURE DROP
CWS	CHILLED WATER SUPPLY	PDI	PLUMBING & DRAINAGE
DDC	DIRECT DIGITAL CONTROLS		INSTITUTE
DIA	DIAMETER	PG	PROPYLENE GLYCOL
DHWC	DOMESTIC HOT WATER CIRC	PH	PHASE
DHW	DOMESTIC HOT WATER HEATER	PHC	PRE HEAT COIL
DN	DOWN	POC	POINT OF CONNECTION
DX	DIRECT EXPANSION	PSIG	POUNDS PER SQUARE INCH GAUGE
(E)	EXISTING	PSI	POUNDS PER SQUARE INCH
EA	EXHAUST AIR	PW	PUMPED WASTE
EBB	ELECTRIC BASEBOARD	RA	RETURN AIR
EF	EXHAUST FAN	RCP	RADIANT CEILING PANEL
EGT	ENTERING GLYCOL TEMPERATURE	RD	ROOF DRAIN
ENT	ENTERING	RECIRC	RECIRCULATION
ET	EXPANSION TANK	RFL	REFRIGERANT LIQUID
EUH	ELECTRIC UNIT HEATER	RFM	RADIANT FLOOR MANIFOLD
EWT	ENTERING WATER TEMPERATURE	RFS	REFRIGERANT SUCTION
FCO	FLOOR CLEANOUT	RHC	REHEAT HEATING COIL
FCU	FAN COIL UNIT	RL	RAINLEADER
FD	FIRE DAMPER	RPBP	REDUCED PRESSURE ZONE
FD	FLOOR DRAIN		BACKFLOW PREVENTER
FM	FORCED MAIN	RTU	ROOF TOP UNIT
FT	FEET	RV	REFRIGERANT VAPOR
FT	FINNED TUBE	RWL	RAIN WATER LEADER
FSD	FIRE SMOKE DAMPER	RZ	RADIANT ZONE
GAL	GALLONS	SA	SUPPLY AIR
GALV	GALVANIZED	SCH	SCHEDULE
GCR	GLYCOL COOLING RETURN	SD	STORM DRAIN
GCS	GLYCOL COOLING SUPPLY	SF	SQUARE FEET
GHR	GLYCOL HEATING RETURN	SF	SUPPLY FAN
GHS	GLYCOL HEATING SUPPLY	SH	STEAM HUMIDIFIER
GMT	GLYCOL MAKE-UP TANK	SP	SUMP PUMP
GPM	GALLONS PER MINUTE	SS	STAINLESS STEEL
HB	HOSE BIBB	TA	TRANSFER AIR
HC	HEATING COIL	TEMP	TEMPERATURE
HP	HORSE POWER	TDH	TOTAL DEVELOPED HEAD
HRV	HEAT RECOVERY VENTILATOR	TP	TRAP PRIMER
HW	HOT WATER	TYP	TYPICAL
HWC	HOT WATER CIRCULATION	UL	UNDERWRITER'S LABORATORY
HWR	HEATING WATER RETURN	UON	UNLESS OTHERWISE NOTED
HWS	HEATING WATER SUPPLY	VAV	VARIABLE AIR VOLUME
HX	HEAT EXCHANGER	UH	UNIT HEATER
HZ	HERTZ	VTR	VENT THROUGH ROOF
ID	INSIDE DIAMETER	VR	VENT RISER
IN	INCHES	W	WASTE
LAV	LAVATORY	W/	WITH
LF	LINEAL FEET	W.C.	WATER COLUMN
LGT	LEAVING GLYCOL TEMP	WCO	WALL CLEANOUT
LHWR	LOW TEMP HEATING WATER RETURN	WH	WATER HEATER
		WHA	WATER HAMMER ARRESTOR
LHWS	LOW TEMP HEATING WATER	WPD	WATER PRESSURE DROP
SUPPLY		WRT	WITH RESPECT TO
LVG	LEAVING		
LWT	LEAVING WATER TEMPERATURE		

CONSULTANT :



PROJECT :
**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**

**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :
**LEGENDS AND
ABBREVIATIONS**

**100% CONSTRUCTION
DOCUMENTS**

DESIGN	DA
DRAWN	CSB
CHECKED	CDF
DATE	02/09/2017

PROJECT No.
ANC 17-27C
SHEET NUMBER

M001

No.	Date	Item
REVISIONS		
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MECHANICAL SPECIFICATIONS

PART 1 - GENERAL

PLANS:
PROVIDE ALL LABOR, MATERIALS, EQUIPMENT, SUPERVISION OF LABOR AND PERFORMANCE OF ALL OPERATIONS REQUIRED TO COMPLETELY INSTALL MECHANICAL AND PLUMBING SYSTEMS AS DEFINED HEREIN AND ON THE DRAWINGS, OPERATING TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE.

CODE:
PERFORM ALL WORK DONE IN ACCORDANCE WITH THE 2009 EDITIONS OF THE: INTERNATIONAL BUILDING CODE (IBC), INTERNATIONAL MECHANICAL CODE (IMC), INTERNATIONAL FUEL-GAS CODE, UNIFORM PLUMBING CODE (UPC) AND 2011 NATIONAL ELECTRICAL CODE (NEC) AS AMENDED BY THE MUNICIPALITY OF ANCHORAGE, AND PER CUSTOMARY AND UNIVERSALLY APPROVED INDUSTRY PRACTICES.

DRAWINGS:
THE DRAWINGS ARE DIAGRAMMATIC, NOT NECESSARILY SHOWING ALL OFFSETS OR EXACT LOCATIONS OF PIPING AND DUCTS UNLESS SPECIFICALLY DIMENSIONED. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION. BRING QUESTIONABLE OR OBSCURE ITEMS, APPARENT CONFLICTS BETWEEN PLANS AND SPECIFICATIONS, GOVERNING CODES OR UTILITIES REGULATIONS, AND MANUFACTURER'S INSTALLATION DIRECTIONS TO THE IMMEDIATE ATTENTION OF THE OWNER'S REPRESENTATIVE. CODES, ORDINANCES, REGULATIONS, MANUFACTURER'S INSTRUCTIONS OR STANDARDS TAKE PRECEDENCE WHEN THEY ARE MORE STRINGENT OR CONFLICT WITH THE DRAWINGS AND SPECIFICATIONS.

COORDINATION:
COORDINATE WORK UNDER THIS DIVISION WITH WORK OF OTHER TRADES TO AVOID CONFLICTS, ERRORS, AND DELAYS. REVIEW THE DRAWINGS AND SPECIFICATIONS FOR EQUIPMENT FURNISHED BY OTHER CRAFTS BUT INSTALLED IN ACCORDANCE WITH THIS SECTION.

EQUIPMENT SUBSTITUTIONS:
SCHEDULED EQUIPMENT IS REPRESENTATIVE OF THE STANDARD OF QUALITY AND PERFORMANCE REQUIRED. WHERE INDICATED WITH "OR EQUAL", SUBSTITUTIONS WILL BE CONSIDERED IF THE CONTRACTOR DEMONSTRATES TO THE SATISFACTION OF THE OWNER'S REPRESENTATIVE THAT THE SUBSTITUTES ARE EQUAL OR BETTER QUALITY INCLUDING CAPACITY, SIZE AND WEIGHT. WHEN A SUBSTITUTION IS APPROVED, THE CONTRACTOR SHALL PERFORM ADDITIONAL DESIGN AND PROVIDE EQUIPMENT AND MATERIAL TO PROVIDE A FULLY OPERATING SYSTEM MEETING THE INTENT OF THE ORIGINAL DESIGN AT NO ADDITIONAL COST TO THE OWNER. ALTERNATE DESIGNS MUST BE REVIEWED AND APPROVED BEFORE PURCHASE OF EQUIPMENT. ADDITIONAL COSTS TO OTHER DISCIPLINES RELATED TO THE SUBSTITUTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

MATERIALS:
PROVIDE ALL MATERIALS NEW AND UNUSED. OBTAIN OWNER'S APPROVAL OF ALL PRODUCTS PRIOR TO ORDERING OR INSTALLING ANY PART OF ANY SYSTEM.

DEMOLITION:

OWNER SHALL HAVE FIRST RIGHT OF REFUSAL ON ALL PIPING AND MATERIALS NOTED FOR REMOVAL AND DEMOLITION. ANY MATERIALS NOT SELECTED BY THE OWNER SHALL BE REMOVED FROM THE JOBSITE AND PROPERLY DISPOSED OF IN ACCORDANCE WITH LOCAL REGULATIONS.

SUBMITTALS:
PROVIDE PRODUCT SUBMITTALS FOR MATERIAL AND EQUIPMENT SHOWN ON THE DRAWINGS, DESCRIBED IN THE SPECIFICATIONS, AND OTHERWISE REQUIRED FOR THE PROJECT. INCLUDE DIMENSIONS, WEIGHTS, CATALOG NUMBERS, WIRING DIAGRAMS, ROUGH-IN DIMENSIONS AND PERFORMANCE DATA FOR ALL MATERIAL AND EQUIPMENT. CLEARLY HIGHLIGHT ANY DEVIATIONS FROM THESE SPECIFICATIONS OR BASIS OF DESIGN. INDEX AND CLEARLY IDENTIFY ALL MATERIAL AND EQUIPMENT BY ITEM, NAME OR DESIGNATION USED ON THE DRAWINGS. SUBMITTAL REVIEW IS FOR GENERAL DESIGN AND ARRANGEMENT ONLY AND DOES NOT RELIEVE THE CONTRACTOR FROM ANY REQUIREMENTS OF THE CONTRACT DOCUMENTS. THE SUBMITTALS ARE NOT CHECKED FOR QUANTITY, DIMENSION, OR FOR PROPER OPERATION. PROVIDE SUBMITTALS ELECTRONICALLY IN PDF FORMAT, WITH SECTIONS CLEARLY LABELED AND BOOKMARKED.

SHOP DRAWINGS:
SUBMIT SHOP DRAWING OF PIPING LAYOUT AND CONNECTIONS TO EXISTING PIPING AND SYSTEMS.

TRAINING:
PROVIDE MINIMUM 4 HOURS OF OWNER TRAINING ON OPERATION AND MAINTENANCE OF HVAC EQUIPMENT.
CONTROLS TRAINING: PROVIDE MINIMUM 4 HOURS TRAINING ON OPERATION AND MAINTENANCE OF HVAC CONTROLS. CONTROLS TRAINING SHALL OCCUR ON TWO SEPARATE TRAINING SESSIONS; FIRST TRAINING SESSION SHALL OCCUR BEFORE SUBSTANTIAL COMPLETION OF PROJECT. SECOND TRAINING SESSION SHALL OCCUR AT LEAST 6 WEEKS AFTER THE FIRST TRAINING SESSION TO ALLOW TIME FOR OWNER TO BECOME FAMILIAR WITH SYSTEM AND PROVIDE CLARIFYING QUESTIONS TO CONTROLS CONTRACTOR.

OPERATION AND MAINTENANCE MANUAL:
PROVIDE THE OWNER WITH AN OPERATING AND MAINTENANCE MANUAL, TO INCLUDE MANUFACTURER'S SPECIFICATIONS, OPERATING AND MAINTENANCE INSTRUCTIONS, WARRANTY INFORMATION ON EACH PIECE OF EQUIPMENT, BALANCE REPORT, AS-BUILT CONSTRUCTION AND SHOP DRAWINGS. PROVIDE CONTACT INFORMATION ON NEAREST SOURCE FOR SPARE PARTS AND SERVICE FOR EACH PIECE OF EQUIPMENT. PROVIDE MANUAL BOTH IN HARD COPY AND IN ELECTRONIC PDF FORMAT.

SPECIAL INSPECTIONS:
SEISMIC - WORK UNDER THIS PROJECT INCLUDES FURNISHING ALL LABOR, MATERIAL, TOOLS, AND EQUIPMENT NECESSARY FOR THE COMPLETE INSTALLATION OF ALL VIBRATION ISOLATION AND SEISMIC RESTRAINT FOR MECHANICAL EQUIPMENT, PIPING, DUCTWORK, AND STACKS AS SPECIFIED AND SHOWN. EQUIPMENT AND SUPPORTS SHALL BE FITTED FOR THE SEISMIC CONTROL PER THE IBC SEISMIC SITE CLASS DEFINITION OF THE PROJECT SITE. METHODS AND MATERIALS SPECIFIED ARE MINIMUM REQUIREMENTS AND SHALL NOT EXCUSE THE CONTRACTOR FROM THE RESPONSIBILITY OF MEETING THE CRITERIA SPECIFIED. ALL CHANGES AND ADDITIONS REQUIRED TO MEET THE CRITERIA SHALL BE MADE WITHOUT COST TO THE OWNER.

PART 2 - MATERIALS

MECHANICAL IDENTIFICATION:
PIPE MARKERS TO BE FACTORY FABRICATED, FLEXIBLE PLASTIC PREFORMED TO FIT AROUND PIPE. PROVIDE ADHESIVE DIRECTIONAL ARROW TAPE ON BOTH SIDES OF THE PIPE MARKER. COLORING AND LETTERING TO CONFORM WITH ASME A13.1. PROVIDE AT EVERY TEE, VALVE, AND PIECE OF EQUIPMENT. PROVIDE VALVE TAGS ON ALL VALVES. PROVIDE FRAMED VALVE TAG DIRECTORY ON WALL OF MECHANICAL ROOM.

HYDRONIC HEATING

PIPE INSULATION:
HYDRONIC AND DOMESTIC WATER PIPING SHALL BE INSULATED WITH PRE-FORMED FIBERGLASS INSULATION WITH ALL-SERVICE JACKET. THICKNESS TO BE MINIMUM 1/2" FOR 1-1/4" PIPE AND SMALLER AND 1" FOR PIPING 1-1/2" AND LARGER.

HYDRONIC PIPING:
PIPE SIZES 3/4" – 2-1/2" DIAMETER: TYPE K COPPER; SOLDERED, BRAZED, OR MECHANICAL COMPRESSION JOINT (PRO-PRESS). PIPE SIZES GREATER THAN 2-1/2": SCHEDULE 40 STEEL, WELDED, MALLEABLE IRON FITTINGS.

GENERAL-DUTY VALVES:
PIPE SIZES 3/4" – 2-1/2": BALL VALVES, BRAZED, SOLDERED, OR THREADED, CLASS 125 WSP, BRONZE, ONE OR TWO PIECE BODY, FULL PORT BALL, TEFLON SEATS AND STUFFING BOX RING, BLOW-OUT PROOF STEM, LEVER HANDLE, SOLDER OR THREADED ENDS.

PIPE SIZES GREATER THAN 2-1/2": GATE VALVES, FLANGED, CLASS 125 WSP, STEEL OR CAST IRON BODY AND GATE. LUG STYLE BUTTERFLY VALVES WITH INDEPENDENT PIPE FLANGES. VALVES TO BE RATED FOR THE FLUID BEING HANDLED. GLOBE VALVES WILL NOT BE PERMITTED.

CHECK VALVES: MSS SP 80, CLASS 150, BRONZE BODY AND CAP, BRONZE SEAT, BUNA-N DISC, SOLDER OR THREADED ENDS.

AIR VENTS:
DISK TYPE VENT WITH BUILT-IN CHECK VALVE FOR MANUAL OR AUTOMATIC OPERATION, DISCS REPLACEABLE WITHOUT DRAINING SYSTEM, 1/8 INCH SHANK, RATED AT 50 PSI.
AUTOMATIC AIR VENT: CAST BRASS, 150 PSIG DESIGN PRESSURE, 270 DEG F OPERATING TEMPERATURE. STAINLESS STEEL LINKAGE, VITON SEAL, BRASS SPRING OPERATED SEAT, WITH ISOLATING VALVE. SPIROTOP BY SPIROTHERM, INC. OR APPROVED EQUAL.

STRAINER:
SIZE 2 INCH AND SMALLER: SCREWED BRASS OR IRON BODY FOR 175 PSIG WORKING PRESSURE, Y PATTERN WITH 1/32 INCH STAINLESS STEEL PERFORATED SCREEN.
SIZE 2-1/2 INCH TO 4 INCH: FLANGED IRON BODY FOR 175 PSIG WORKING PRESSURE, Y PATTERN WITH 20 MESH STAINLESS STEEL PERFORATED SCREEN.

BALANCE VALVES:
BRONZE BODY, BRASS BALL CONSTRUCTION (SIZES OVER 2-1/2 INCHES SHALL BE CAST IRON OR DUCTILE IRON) WITH GLASS AND CARBON FILLED TFE SEAT RINGS. VALVES TO HAVE DIFFERENTIAL PRESSURE READOUT PORTS ACROSS VALVE SEAT AREA. READOUT PORTS SHALL BE FITTED WITH INTERNAL EPT INSERT AND CHECK VALVE. VALVE BODIES TO HAVE NPT TAPPED DRAIN/PURGE PORT. VALVES TO HAVE MEMORY STOP FEATURE, CALIBRATED NAMEPLATE, AND SHALL BE LEAK TIGHT AT FULL RATED PRESSURE. CONNECTION: SOLDERED, THREADED, OR FLANGED. LIMITS OF CONSTRUCTION: 175 PSIG AT 250 DEGREES F.

FLOW CONTROL VALVES:
BRASS OR BRONZE BODY WITH UNION ON INLET. TEMPERATURE AND PRESSURE TEST PLUG ON INLET AND OUTLET. CONTROL WITHIN 5 PERCENT OF DESIGN FLOW OVER ENTIRE OPERATING PRESSURE. MAX FLOW TO BE DESIGNED AROUND 2 PSIG DIFFERENTIAL PRESSURE ACROSS TERMINAL DEVICE.

NATURAL GAS BURNER (B-1, B-2, & B-3):
RIELLO RS, RLS, RX SERIES OR PRE-APPROVED EQUAL. BURNERS FOR REFURBISHED B-1 AND B-2 BOILERS SHALL MATCH THE BURNER FOR NEW BOILER B-3 FOR OPERATION AND MAINTENANCE CONSISTENCY. ALTERNATE BURNER MANUFACTURERS OR MODELS ACROSS BOILERS IS NOT PERMITTED.

THE BURNER SHALL BE A PACKAGED DESIGN (AIR BLOWER, MOTOR, AND IGNITER) CAPABLE OF OPERATION ON NATURAL GAS WITH A MAXIMUM 10:1 TURNDOWN. THE BURNER SHALL NOT PRODUCE MORE THAN 0.04% CARBON MONOXIDE (CO) OR 30 PPM NITROGEN OXIDE GASES NOx AT ALL FIRING RATES. THE BURNER SHALL FEATURE FULLY INDEPENDENT, LINKAGELESS AIR AND FUEL ACTUATORS, SIEMENS LMV 3, 5, OR PRE-APPROVED EQUAL. THE BURNER SHALL INCLUDE ON-BOARD WATER TEMPERATURE CONTROL.

CONDENSING NATURAL GAS BOILER (B-3):
RIELLO RTC SERIES BOILER WITH MODULATING BURNER OR PRE-APPROVED EQUAL. THE BOILER SHALL BE CAPABLE OF OPERATING IN A ZERO-FLOW CONDITION WITHOUT OVERHEATING AND CONDENSING IN THE PRIMARY HEAT EXCHANGER, COUNTER CURRENT WATER FLOW VS. FLUE GAS, THE USE OF A SECONDARY HEAT EXCHANGER FOR CONDENSING IS NOT PERMITTED. THE BOILER SHALL BE CONSTRUCTED IN CONFORMANCE TO ASME SECTION IV AND UL 795. THE BOILER SHALL BEAR THE ASME SECTION IV STAMP AND BE NATIONAL BOARD LISTED FOR 160 PSI WORKING PRESSURE AND 195°F. THE SAFETY CONTROLS SHALL CONFORM TO REQUIREMENTS OF UL 795 AND ASME CSD-1.
DESCRIPTION: CONDENSING HOT WATER BOILERS WITH FORCED DRAFT, INSULATED JACKET, FIRE TUBE, TYPE 316L STAINLESS STEEL HEAT EXCHANGER, NATURAL GAS BURNING SYSTEM, VERTICAL OR HORIZONTAL FLUE DISCHARGE, AND BOILER TRIM. FURNISH WATER WALL DESIGN CONSISTING OF WATER BACKED COMBUSTION AREA WITH WATER CIRCULATING AROUND FIREBOX. REFRACTORY CHAMBER OR SEPARATE BASE NOT REQUIRED.
JACKET: MODULAR INSULATED JACKET WITH MINIMUM 20 GAUGE STEEL JACKET, FINISHED WITH FACTORY APPLIED BAKED ENAMEL. FLUE OUTLET DAMPER ASSEMBLY.
HOT WATER BOILER TRIM, TYPICAL FOR EACH BOILER: ASME RATED PRESSURE RELIEF VALVE, 30 PSIG, WITH REDUCING BUSHING AS REQUIRED. COMBINATION WATER PRESSURE AND TEMPERATURE GAGE. FURNISH GRADUATED PRESSURE GAGE SCALE FROM 1-1/2 TO 3 TIMES PRESSURE RELIEF VALVE PRESSURE SETTING. LOW FIRE HOLD AQUASTAT. MODULATING CONTROL MODULE. PROBE TYPE LOW WATER CUT-OFF WITH MANUAL RESET TO PREVENT BURNER OPERATION WHEN BOILER WATER FALLS BELOW SAFE LEVEL. HIGH LIMIT TEMPERATURE CONTROLLER WITH AUTO RESET. REDUNDANT HIGH LIMIT TEMPERATURE CONTROLLER WITH MANUAL RESET. BOILER AIR VENT. CONTROL TRANSFORMER. DRAIN VALVE. OBSERVATION PORT.

BURNER OPERATION: MODULATING, WITH TURN DOWN RATIO OF NOT LESS THAN 10:1, WITH LOW FIRE POSITION FOR IGNITION. BURNER SHALL BE SEAMLESSLY INTEGRATED INTO BOILER CONTROL PANEL.
BURNER SAFETY CONTROLS: ENERGIZE BURNER MOTOR AND ELECTRIC IGNITION, LIMIT TIME FOR ESTABLISHMENT OF MAIN FLAME, MONITOR FLAME CONTINUOUSLY DURING BURNER OPERATION AND STOP BURNER ON FLAME FAILURE WITH MANUAL RESET NECESSARY. PRE-WIRED, FACTORY ASSEMBLED ELECTRONIC CONTROLS IN CONTROL CABINET WITH FLAME SCANNER OR DETECTOR, PROGRAMMING CONTROL, RELAYS, AND SWITCHES. FURNISH PRE-PURGE AND POST-PURGE IGNITION AND SHUT DOWN OF BURNER IN EVENT OF IGNITION PILOT AND MAIN FLAME FAILURE WITH MANUAL RESET. CONTROLS SHALL WORK SEAMLESSLY WITH BOILER CONTROL PANEL.
ELECTRICAL POWER: SINGLE-POINT FIELD POWER CONNECTION: FACTORY-INSTALLED AND FACTORY-WIRED SWITCHES, MOTOR CONTROLLERS, TRANSFORMERS AND OTHER ELECTRICAL DEVICES SHALL PROVIDE A SINGLE-POINT FIELD POWER CONNECTION TO THE BOILER.

BOILER FLUE: CATEGORY IV VENTING. THE FLUE DUCT SHALL BE DOUBLE WALL, AISI 316L AL 29-4C, POSITIVE PRESSURE TYPE VENT MATERIAL.

PUMPS:
VFD DRIVEN PUMPS (CP-01): GRUNDFOS, BELL & GOSSETT, ARMSTRONG, TACO, OR PRE-APPROVED EQUAL. IN-LINE OR BASE-MOUNTED END-SUCTION. CLOSE-COUPLED, SINGLE STAGE, DIRECT CONNECTED MULTIPLE SPEED WET ROTOR MOTOR. PROVIDE SUCTION DIFFUSER STRAINER.
CASING: CAST IRON WITH SUCTION AND DISCHARGE GAGE PORT, CASING WEAR RING, SEAL FLUSH CONNECTION, DRAIN PLUG, FLANGED SUCTION AND DISCHARGE
IMPELLER: BRONZE OR STAINLESS STEEL, FULLY ENCLOSED, KEYED DIRECTLY TO MOTOR SHAFT OR EXTENSION.
SHAFT: ALLOY OR STAINLESS STEEL WITH COPPER OR BRONZE SLEEVE, INTEGRAL THRUST COLLAR.
SEAL: CARBON ROTATING AGAINST STATIONARY CERAMIC SEAT, 225 DEGREES F MAXIMUM CONTINUOUS OPERATING TEMPERATURE.
BEARINGS: METAL/GRAPHITE/CERAMIC.

IN-LINE BOOSTER PUMPS (CP-02, CP-03, CP-04, CP-05): GRUNDFOS, BELL & GOSSETT, ARMSTRONG, TACO, OR PRE-APPROVED EQUAL. IN-LINE, CLOSE-COUPLED, SINGLE STAGE, DIRECT CONNECTED MULTIPLE SPEED WET ROTOR MOTOR.
CASING: CAST IRON.
IMPELLER SHAFT: STAINLESS STEEL.
BEARINGS: METAL/GRAPHITE/CERAMIC.

VARIABLE FREQUENCY DRIVES (VFD):
ACCEPTED MANUFACTURERS: ABB MODEL ACH550, SIEMENS BT300, OR PRE-APPROVED EQUAL.
FURNISH VARIABLE FREQUENCY DRIVES AS SHOWN ON PUMP SCHEDULE, BYPASS NOT REQUIRED ON REDUNDANT LEAD-LAG PUMP SETS.

MECHANICAL CONTRACTOR PROVIDES: VARIABLE FREQUENCY DRIVES (VFDS), CLASS 1 POWER AND SIGNAL WIRING BELOW 30 VOLTS. (VFDS AND CONTROL WIRING TYPICALLY PROVIDED BY CONTROLS CONTRACTOR.)
ELECTRICAL CONTRACTOR PROVIDES: MOUNTING AND POWER WIRING OF VARIABLE FREQUENCY DRIVES (VFDS). CLASS 2 POWER WIRING INCLUDING POWER WIRING 115 VOLTS AND HIGHER.

GENERAL: THE VFD SHALL CONVERT THREE-PHASE, 60 HZ UTILITY POWER TO ADJUSTABLE VOLTAGE AND FREQUENCY, THREE-PHASE, AC POWER FOR STEPLESS MOTOR SPEED CONTROL FROM 10% TO 100% OF THE MOTOR'S 60 HZ SPEED. INPUT VOLTAGE SHALL BE AS SPECIFIED ON THE DRAWING SCHEDULE. THE VFD SHALL INCLUDE A CONVERTER AND AN INVERTER SECTION. THE CONVERTER SECTION SHALL CONVERT FIXED FREQUENCY AND VOLTAGE AC UTILITY POWER TO VARIABLE DC VOLTAGE. VFD'S THAT USE SILICON CONTROLLED RECTIFIERS IN THE CONVERTER BRIDGE SHALL ALSO INCLUDE AN INPUT POWER ISOLATION TRANSFORMER. THE ISOLATION TRANSFORMER SHALL BE HOUSED IN A SEPARATE NEMA 1 ENCLOSURE AND SHALL INCLUDE A COPPER ELECTROSTATIC SHIELD. THE VFD AND OPTIONS SHALL BE LISTED BY A NATIONALLY RECOGNIZED TESTING AGENCY SUCH AS UL OR ETL. THE VFD AND OPTIONS SHALL COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE LATEST STANDARDS OF ANSI, IEEE, AND THE NATIONAL ELECTRIC CODE. POWER LINE NOISE SHALL BE LIMITED TO A VOLTAGE DISTORTION FACTOR AND LINE NOTCH DEPTH AS DEFINED IN IEEE STANDARD 519-1981, GUIDE FOR HARMONIC CONTROL AND REACTIVE COMPENSATION OF STATIC POWER CONVERTERS. THE VFD SHALL NOT EMIT EITHER CONDUCTED OR RADIATED RFI IN EXCESS OF THE LIMITATIONS SET FORTH IN THE FCC RULES AND REGULATIONS, PART 15, SUBPART J.

CONSTRUCTION: THE VFD SHALL BE HOUSED IN A NEMA 1 ENCLOSURE AND SHALL INCLUDE A FUSED DISCONNECT. RUN/STOP SELECTOR SWITCH. AUTO/MANUAL SELECTOR SWITCH. MANUAL SPEED POTENTIOMETER OR KEYPAD. POWER ON PILOT LIGHT. FAULT PILOT LIGHT. DIGITAL LCD SCREEN READOUT. VOLT METER AND AMP METER. INPUT CIRCUIT BREAKER. FACTORY MINIMUM-LEVEL SPARE FUSE KIT.

VFD CABLE: PROVIDE VFD CABLE CUTSHEET FOR REVIEW WITH VFD SUBMITTAL. USE MULTI CONDUCTOR, 1000V, BLACK, CAPACITANCE LESS THAN 30PF/FT., UL FLEXIBLE MOTOR SUPPLY CABLE DESIGNED SPECIFICALLY FOR USE WITH AC MOTOR DRIVES. BASIS OF DESIGN IS BELDEN #29502 VFD CABLE; SUBSTITUTES MAY BE SUBMITTED FOR APPROVAL AND SHALL BE OF EQUAL OR GREATER QUALITY.
MAXIMUM CABLE LENGTH BETWEEN VFD TO MOTOR SHALL NOT EXCEED 27 LINEAR FEET OF CABLE.

REQUIRED PROTECTIVE FEATURES: WHEN INPUT POWER RETURNS TO NORMAL FOLLOWING A FAULT TRIP FOR UNDERVOLTAGE, OVERVOLTAGE, OR PHASE LOSS, THE VFD SHALL AUTOMATICALLY RESTART. THE VFD SHALL NOT AUTOMATICALLY RESTART FOLLOWING FAULT TRIPS DUE TO OVERLOAD OR OVERCURRENT. CURRENT LIMITING SEMICONDUCTOR FUSED FOR THE POWER INPUT. SEPARATE OVERLOAD RELAY FOR EACH MOTOR CONTROLLED. PROTECTION AGAINST INPUT POWER UNDERVOLTAGE, OVERVOLTAGE AND PHASE LOSS. PROTECTION AGAINST OUTPUT CURRENT OVERLOAD AND OVERCURRENT. PROTECTION AGAINST OVERTEMPERATURE WITHIN THE VFD. PROTECTION AGAINST OVERVOLTAGE ON THE DC BUS. ANY DISCONNECT SWITCHES BETWEEN VFD AND THE MOTOR SHALL INCLUDE AN AUXILIARY CONTACT INTERLOCKED TO THE VFD FAULT TRIP CIRCUIT. DC BUS DISCHARGE CIRCUIT FOR PROTECTION OF SERVICE PERSONNEL.

CONSULTANT :



PDC INC. ENGINEERS
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907-743-3200 | AEC00605

PROJECT :

**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**

2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508

SHEET TITLE :

**MECHANICAL
SPECIFICATIONS**

**100% CONSTRUCTION
DOCUMENTS**

DESIGN	DA
DRAWN	CSB
CHECKED	CDF
DATE	02/09/2017

PROJECT No.
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SHEET NUMBER

M002

No.	Date	Item
REVISIONS		

MECHANICAL SPECIFICATIONS

ADJUSTMENTS: THE VFD SHALL INCLUDE THE FOLLOWING ADJUSTMENTS: MAXIMUM SPEED, MINIMUM SPEED, RAMP TIME, DECELERATION TIME, CURRENT LIMIT.

VFD STARTUP & WARRANTY: THE MANUFACTURER SHALL PROVIDE START-UP SERVICE IN THE FORM OF A FACTORY TRAINED SERVICE TECHNICIAN. THE SERVICE TECHNICIAN SHALL VERIFY CORRECT INSTALLATION, START-UP THE DRIVE AND CHECK FOR PROPER OPERATION. THE VFD SHALL BE WARRANTED BY THE MANUFACTURER FOR A PERIOD OF 24 MONTHS FROM THE DATE OF SHIPMENT. THE WARRANTY SHALL INCLUDE PARTS, LABOR, TRAVEL COSTS, AND LIVING EXPENSES INCURRED BY THE MANUFACTURER TO PROVIDE FACTORY-AUTHORIZED SERVICE.

NATURAL GAS PIPING:
STEEL PIPE: ASTM A53/A53M OR ASME B36.10M SCHEDULE 40 BLACK. FITTINGS: ASME B16.3, MALLEABLE IRON, OR ASTM A234/A234M WROUGHT CARBON STEEL AND ALLOY STEEL WELDING TYPE. JOINTS: THREADED WITH PIPE DOPE FOR PIPE 2 INCH AND SMALLER; WELDED FOR PIPE 2-1/2 INCHES AND LARGER. UNIONS FOR PIPE 2 INCHES AND SMALLER; FERROUS PIPING, CLASS 150, MALLEABLE IRON, THREADED. DIELECTRIC CONNECTIONS: UNION WITH GALVANIZED OR PLATED STEEL THREADED END, WATER IMPERVIOUS ISOLATION BARRIER.
NATURAL GAS RATED BALL VALVES: MANUFACTURERS: CRANE VALVE, NORTH AMERICA, HAMMOND VALVE, MILWAUKEE VALVE COMPANY, NIBCO, INC. 1/4 INCH TO 1 INCH: MSS SP 110, CLASS 125, TWO PIECE, THREADED ENDS, BRONZE BODY, CHROME PLATED BRONZE BALL, REINFORCED TEFLON SEATS, BLOW-OUT PROOF STEM, LEVER HANDLE, UL 842 LISTED FOR FLAMMABLE LIQUIDS AND LPG, FULL PORT.
PIPE HANGERS AND SUPPORTS: CONFORM TO NFPA 31. HANGERS FOR PIPE SIZES 1/2 TO 1-1/2 INCH: CARBON STEEL, ADJUSTABLE SWIVEL, SPLIT RING, FLOOR SUPPORT: CAST IRON ADJUSTABLE PIPE SADDLE, LOCK NUT, NIPPLE, FLOOR FLANGE, AND CONCRETE PIER OR STEEL SUPPORT.

CONTROLS

CONTROL DAMPERS:
OUTSIDE AIR AND RELIEF AIR DUTY: THERMALLY EFFICIENT INSULATED BLADES. RUSKIN TED50 OR EQUAL.

CONTROL VALVES:
MAXIMUM 3 PSI DIFFERENTIAL PRESSURE ACROSS CONTROL VALVES.

ACTUATORS:
PROVIDE ELECTRIC DAMPER ACTUATORS SIZED WITH ADEQUATE TORQUE FOR APPLICATION.

SENSORS:
WET TEMPERATURE SENSORS: PROVIDE WET WELL TEMPERATURE SENSORS IN HYDRONIC PIPING. PROVIDE SENSOR COMPATIBLE WITH CONTROL STRATEGY DESCRIBED BELOW.
PROVIDE FLAT PLATE ROOM TEMP SENSORS IN MECHANICAL ROOM.

ROOM TEMPERATURE SENSORS: PROVIDE FLAT PLAT ROOM TEMPERATURE SENSORS TO SERVE MECHANICAL ROOMS.

PART 3 – INSTALLATION

INSTALL ALL EQUIPMENT IN ACCORDANCE WITH MANUFACTURER’S RECOMMENDATIONS AND IN THE BEST PRACTICE OF THE CRAFT.

PROVIDE CLEARANCE IN HANGERS AND FROM STRUCTURE AND OTHER EQUIPMENT FOR INSTALLATION OF INSULATION AND ACCESS TO VALVES AND FITTINGS.

ACCESS:
PROVIDE MAINTENANCE ACCESS TO ALL SERVICEABLE AND/OR OPERABLE EQUIPMENT.

TEST AND START-UP:
TEST AND CLEAN ALL DOMESTIC WATER AND HEATING SYSTEMS IN ACCORDANCE WITH THE INTERNATIONAL MECHANICAL CODE AND UNIFORM PLUMBING CODE. FLUSH AND CLEAN GLYCOL SYSTEM PRIOR TO INSTALLATION OF GLYCOL. CLEAN GLYCOL PIPING WITH TRISODIUM PHOSPHATE MIXTURE PRIOR TO FILLING.

CLEAN ALL STRAINERS. REMOVE CONSTRUCTION STRAINERS.

TESTING AND BALANCING:
BALANCING SHALL BE IN ACCORDANCE WITH NEBB STANDARDS. TESTING AND BALANCING OF MECHANICAL SYSTEMS SHALL OCCUR AT THE COMPLETION OF THE PROJECT. SUBMIT BALANCING REPORT TO THE OWNER’S REPRESENTATIVE AT THE COMPLETION OF EACH PHASE. HYDRONIC FLOW RATES AND AIRFLOW RATES TO BE BALANCED WITHIN +/- 10% OF THOSE INDICATED ON DRAWINGS.

NATURAL GAS PIPING:
REAM PIPE AND TUBE ENDS. REMOVE BURRS. REMOVE SCALE AND DIRT, ON INSIDE AND OUTSIDE, BEFORE ASSEMBLY. PREPARE PIPING CONNECTIONS TO EQUIPMENT WITH FLANGES OR UNIONS.

LABELING:
PROVIDE PERMANENT ENGRAVED PLASTIC LABELS ON ALL EQUIPMENT PROVIDED, HALF INCH WHITE LETTERS ON BLACK BACKGROUND.
PROVIDE PIPE IDENTIFICATION TAGS EVERY 20 FEET, AT EQUIPMENT, AT PIPE TEES, AND AT WALL PENETRATIONS.

HVAC SEQUENCE OF OPERATIONS

BOILERS: (B-1, B-2, B-3)
BOILER CONTROL PANEL IS TO BE PROVIDED BY BOILER MANUFACTURER. BOILERS SHALL OPERATE UPON MANUFACTURER PROVIDED CONTROLS TO MODULATE FIRING RATE AND STAGE BOILERS TO MAINTAIN HOT WATER TEMPERATURE SETPOINT. BOILER CONTROL PANEL SHALL CONTROL LEAD-LAG STAGING AND BOILER MODULATION. THE BOILER CONTROLS SHALL BE FULLY AND SEAMLESSLY INTEGRATED WITH EACH BOILER BURNER CONTROL PACKAGE INCLUDING ENABLING, STAGING, FIRE CONTROL (MODULATION), STATUS AND ALARMS. CONNECT BOILER BURNER CONTROL MODULE TO ITS CORRESPONDING TEMPERATURE SENSOR ON THE BOILER PIPING SYSTEM. STAGING DESIGNATIONS SHALL BE ROTATED ON A MONTHLY BASIS ON THE FIRST MONDAY OF THE MONTH.

BAS SHALL PROVIDE REMOTE HOT WATER TEMPERATURE SETPOINT AND BOILER PLANT ENABLE. BAS CONTRACTOR SHALL CONNECT TO BOILER CONTROLS VIA BACNET OR MODBUS CONNECTION FOR SUBPOINT MONITORING. BAS SHALL MONITOR BOILER CONTROL PANEL ALARM OUTPUTS. BAS SHALL CONTROL PRIMARY HYDRONIC PUMPS. PROVIDE ADDITIONAL FIELD SENSORS AND FIELD WIRING FOR THE BAS SYSTEM TO MONITOR ALL POINTS AND ALARMS NOTED IN THIS SECTION.
PRIMARY HYDRONIC PUMPS SHALL BE ENABLED AND PROOFED ON FOR 5 MINUTES (ADJUSTABLE) BEFORE THE BOILERS ARE ENABLED.

MAIN SYSTEM HWS HEADER TEMPERATURE SETPOINT SHALL BE ADJUSTED BASED ON AN OUTSIDE AIR TEMPERATURE RESET SCHEDULE AS FOLLOWS, AND BE ADJUSTABLE BY THE OPERATOR. IF HWS TEMPERATURE EVER DECREASES BELOW 140 DEGREES F THEN GENERATE AN ALARM AT THE BAS, DISABLE BOILERS B-1 & B-2 TO AVOID CONDENSING, ONLY BOILER B-3 SHALL OPERATE.

OUTSIDE AIR TEMPERATURE	HWS HEADER TEMPERATURE SETPOINT
LOWER THAN 30 DEGREES F	180 DEGREES F (ADJUSTABLE)
HIGHER THAN 50 DEGREES F	160 DEGREES F (ADJUSTABLE)

BOILER PLANT ENABLE: BOILER PLANT SHALL OPERATE YEAR ROUND FOR DOMESTIC HOT WATER PRODUCTION. ON INITIAL BOILER PLANT STARTUP, ENABLE MAIN PUMP SET. AFTER MAIN PUMP SET HAS PROVEN ON FOR 10 MINUTES (ADJUSTABLE), ENABLE THE LEAD BOILER. FIRING RATES AND BOILER STAGING TO BE CONTROLLED BY THE BOILER CONTROL PANEL.

ALARMS AND DISABLING: UPON ACTIVATION OF ANY BOILER EMERGENCY PUSH BUTTON, ALL BOILERS SHALL BE DISABLED. MAIN HYDRONIC PUMPS SHALL CONTINUE TO OPERATE TO EXTRACT HEAT FROM BOILERS. INDIVIDUAL BOILER SAFETY ALARMS NOTED BELOW SHALL BE PRESENTED ON THE BAS SYSTEM. IF BOILER RETURN TEMPERATURE DROPS BELOW SETPOINT BY 20 DEGREES FOR 15 MINUTES (ADJUSTABLE); SIGNAL MAINTENANCE ALARM. IF BOILER SUPPLY TEMPERATURE RISES ABOVE SETPOINT BY 20 DEGREES FOR 15 MINUTES (ADJUSTABLE), SIGNAL MAINTENANCE ALARM. IF LEAD BOILER FAILS THEN A “LEAD BOILER FAILURE ALARM” SHALL BE GENERATED AT THE BAS. IF LEAD AND LAG BOILER FAILS, THEN A “CRITICAL BOILER FAILURE ALARM” SHALL BE GENERATED AT THE BAS.

SYSTEM PRESSURE: MONITOR THE SYSTEM PRESSURE IN THE PIPING SYSTEM AND GENERATE AN ALARM IF SYSTEM PRESSURE DROPS BELOW 18 PSI (ADJUSTABLE).

BOILER PLANT SHUTDOWN: DISABLE BOILERS. MAIN PUMP SET SHALL CONTINUE TO RUN A MINIMUM OF 20 MINUTES (ADJUSTABLE).

THE FOLLOWING POINTS SHALL BE SHOWN ON THE GRAPHICAL USER INTERFACE:

POINT	TYPE	ALARM
OUTSIDE AIR TEMPERATURE (TYPICAL OF EACH BOILER)	AI	-
BOILER FAILURE (GENERAL)	DI	CRITICAL
BOILER STAGING CONFIGURATION	AI	-
BOILER LOW WATER ALARM	DI	CRITICAL
BOILER HIGH TEMPERATURE ALARM	DI	CRITICAL
BOILER LOW GAS PRESSURE	DI	CRITICAL
BOILER FLAME FAILURE	DI	CRITICAL
HWS MAIN TEMPERATURE	AI	MAINTENANCE
HWS MAIN SETPOINT	AO	-
HWR MAIN TEMPERATURE	AI	MAINTENANCE
SYSTEM PRESSURE	AI	CRITICAL

VFD DRIVEN PUMPS: (CP-01A/B)
HEATING PUMPS ARE VARIABLE SPEED PUMPS THAT OPERATE TO MAINTAIN A DIFFERENTIAL PRESSURE SETPOINT BASED ON THE LOWEST READING DIFFERENTIAL PRESSURE SENSOR. SEE DRAWINGS FOR REMOTE DIFFERENTIAL PRESSURE SENSOR LOCATIONS. PRESSURE SENSOR INPUT IS TO BE AVERAGED OVER A 5 MINUTE (ADJUSTABLE) PERIOD.
PUMP OPERATION: OPERATE PUMPS IF BOILER SYSTEM IS ENABLED, SEE BOILER STARTUP SEQUENCE.

PUMP SPEED: UPON INITIAL STARTUP THE SYSTEM PRESSURE SETPOINT SHALL BE RAMPED FOR 5 MINUTES (ADJUSTABLE) FROM 0.0 PSIG TO POSITIVE 5.0 PSIG (ADJUSTABLE). ADJUST VFD CONTROLLER OUTPUTS TO MODULATE PUMP SPEED BETWEEN 30 PERCENT AND 100 PERCENT FLOW TO MAINTAIN PRESSURE SETPOINT AT DIFFERENTIAL PRESSURE SENSOR. SET INITIAL PRESSURE DIFFERENTIAL SETPOINT TO 5.0 PSIG (ADJUSTABLE). GENERATE A MAINTENANCE ALARM IF THE MINIMUM SYSTEM DIFFERENTIAL PRESSURE IS NOT MAINTAINED WITHIN 2 PSIG FOR 5 MINUTES (ADJUSTABLE). NOTE: MINIMUM PUMP FLOW AS SHOWN ON PUMP SCHEDULE, COORDINATE WITH TESTING AND BALANCING TECHNICIAN TO DETERMINE MINIMUM PUMP SPEED.

PUMP FAILURE: PUMP STATUS FOR FAILURE ALARM PURPOSES SHALL BE DETERMINED THROUGH THE VFD. IF THE LEAD PUMP FAILS OR DOES NOT PROVE ON WITHIN 1 MINUTE, THEN GENERATE A “LEAD PUMP FAILURE” ALARM AT THE BAS AND START THE LAG PUMP. IF THE LEAD PUMP PROVES ON THROUGH VFD, THEN DISABLE LAG PUMP. IF THE LAG PUMP FAILS OR DOES NOT PROVE ON, THEN GENERATE A “CRITICAL PUMP FAILURE” ALARM AT THE BAS. IN THE EVENT OF A VFD FAILURE, THE CORRESPONDING PUMP SHALL STOP.

THE FOLLOWING POINTS SHALL BE SHOWN ON THE GRAPHICAL USER INTERFACE:

POINT	TYPE	ALARM
(TYPICAL EACH PUMP)		
ENABLE	DO	-
VFD SPEED	AO	-
PUMP STATUS	DI	CRITICAL
VFD TROUBLE	DI	MAINTENANCE
REMOTE DIFFERENTIAL PRESSURE	AI	MAINTENANCE
REMOTE DIFFERENTIAL SETPOINT	AO	-
SYSTEM PRESSURE	AI	MAINTENANCE

CONSTANT SPEED PUMPS: (CP-02A/B, CP-03A/B, CP-04A/B, CP-05A/B)
PUMP OPERATION: HOT WATER CIRCULATING PUMPS AND CONSTANT SPEED AND SHALL OPERATE CONTINUOUSLY IF BOILER IS ENABLED.

PUMP FAILURE: PUMP STATUS FOR FAILURE ALARM PURPOSES SHALL BE DETERMINED BY A CURRENT SENSOR. IF THE LEAD PUMP FAILS OR DOES NOT PROVE ON WITHIN 1 MINUTE, THEN GENERATE A “LEAD PUMP FAILURE” ALARM AT THE BAS AND START THE LAG PUMP. IF THE LEAD PUMP PROVES ON, THEN DISABLE LAG PUMP. IF THE LAG PUMP FAILS OR DOES NOT PROVE ON, THEN GENERATE A “CRITICAL PUMP FAILURE” ALARM AT THE BAS.

IF THE PUMP SUPPLY TEMPERATURE FROM THE PUMP IS LESS THAN 10 DEGREES F BELOW THE HWS SETPOINT FOR 5 MINUTES, THEN DISABLE THE LEAD PUMP AND GENERATE A MAINTENANCE ALARM.

THE FOLLOWING POINTS SHALL BE SHOWN ON THE GRAPHICAL USER INTERFACE

POINT	TYPE	ALARM
PUMP COMMAND	DO	-
PUMP STATUS	DI	CRITICAL
PUMP SUPPLY TEMPERATURE	AI	ALARM

MECHANICAL ROOM EXHAUST FAN: (EXISTING MECHANICAL ROOM EXHAUST FAN)
FAN STATUS SHALL BE MONITORED BY A CURRENT SENSOR RELAY. UPON FAILURE OF FAN OPERATION, A MAINTENANCE ALARM SHALL BE GENERATED.


UPON CALL FOR SPACE COOLING, INITIALLY SET AT 80 DEGREES F (ADJUSTABLE), THE VENTILATION FAN SHALL BECOME ENERGIZED. IF THE ROOM TEMPERATURE IS LESS THAN 75 DEGREES F (ADJUSTABLE), DISABLE THE VENTILATION FAN.
IF THE ROOM TEMPERATURE IS GREATER THAN 90 DEGREES F OR LESS THAN 55 DEGREES F, A MAINTENANCE ALARM SHALL BE GENERATED.

THE FOLLOWING POINTS SHALL BE SHOWN ON THE GRAPHICAL USER INTERFACE

POINT	TYPE	ALARM
FAN COMMAND	DO	-
FAN STATUS	DI	MAINTENANCE
SPACE TEMPERATURE	AI	-
SPACE TEMP SETPOINT	AO	MAINTENANCE

CONSULTANT :





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PROJECT :

**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**

**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :

**MECHANICAL
SPECIFICATIONS**

**100% CONSTRUCTION
DOCUMENTS**

DESIGN	Designer
DRAWN	Author
CHECKED	Checker
DATE	02/09/2017

PROJECT No.
ANC 17-27C

SHEET NUMBER
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REVISIONS		
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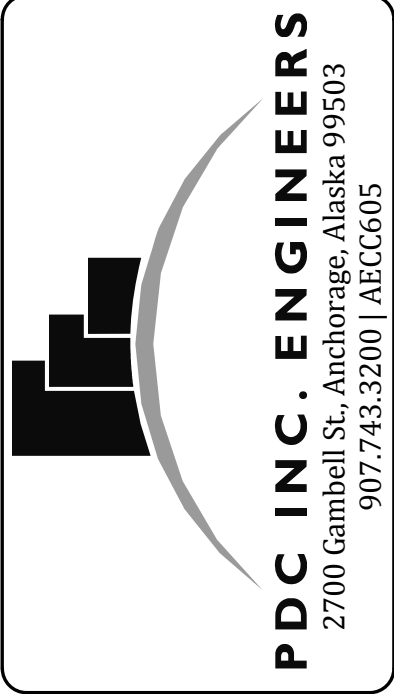
BOILER SCHEDULE											
MARK	TYPE	INPUT (MBH)	GROSS OUTPUT (MBH)	FUEL	PRV PRESSURE (PSI)	BURNER ELECTRICAL			BASIS OF DESIGN		COMMENTS
						HP	V	PH	MANUFACTURER	MODEL	
(E)B-1	CAST IRON SECTIONAL	7,000	6,028	NATURAL GAS	30	5	208	3	WEIL-MCLAIN	H-2194	EXISTING BOILER PROVIDE NEW SECTION GASKETS, PROVIDE RIELLO RS190E LINKAGELESS MODULATING NG BURNER, NG GAS-TRAIN, AND ASSOCIATED BOILER SAFETIES AND CONTROLS.
(E)B-2	CAST IRON SECTIONAL	7,000	6,028	NATURAL GAS	30	5	208	3	WEIL-MCLAIN	H-2194	EXISTING BOILER PROVIDE NEW SECTION GASKETS, PROVIDE RIELLO RS190E LINKAGELESS MODULATING NG BURNER, NG GAS-TRAIN, AND ASSOCIATED BOILER SAFETIES AND CONTROLS.
B-3	SS FIRETUBE	6,000	5,640	NATURAL GAS	30	5	208	3	RIELLO	RTC 6000	PROVIDE RIELLO RS190E LINKAGELESS MODULATING NG BURNER, NG GAS-TRAIN, AND ASSOCIATED BOILER SAFETIES AND CONTROLS.

PUMP SCHEDULE															
MARK	LOCATION	SERVICE	FLOW (GPM)	HEAD (FT)	FLUID	TYPE	RPM	SPEED SETTING	ELECTRICAL				BASIS OF DESIGN		COMMENTS
									HP	V	PH	VFD	MANUFACTURER	MODEL	
CP-01A	MECH ROOM	BUILDING HEAT	510	72	WATER	BASE-MOUNTED, END-SUCTION	1,770	-	15	208	3	Yes	BELL & GOSSETT	e-1532 4BD	MINIMUM FLOW 140 GPM
CP-01B	MECH ROOM	BUILDING HEAT	510	72	WATER	BASE-MOUNTED, END-SUCTION	1,770	-	15	208	3	Yes	BELL & GOSSETT	e-1532 4BD	MINIMUM FLOW 140 GPM
CP-02A	KITCHEN/SCHOOL UTLIDOR	SCHOOL	133	83	WATER	INLINE	3,450	-	5	208	3		BELL & GOSSETT	e-90 2AAC	
CP-02B	KITCHEN/SCHOOL UTLIDOR	SCHOOL	133	83	WATER	INLINE	3,450	-	5	208	3		BELL & GOSSETT	e-90 2AAC	
CP-03A	KITCHEN/SCHOOL UTLIDOR	KITCHEN	12	68.5	WATER	INLINE	1,750	3	1/3	120	1		GRUNDFOS	UPS 50-40	
CP-03B	KITCHEN/SCHOOL UTLIDOR	KITCHEN	12	68.5	WATER	INLINE	1,750	3	1/3	120	1		GRUNDFOS	UPS 50-40	
CP-04A	GYM UTILIDOR	GYM	40	28	WATER	INLINE	3,450	2	3/4	208	3		GRUNDFOS	UPS 40-160	
CP-04B	GYM UTILIDOR	GYM	40	28	WATER	INLINE	3,450	2	3/4	208	3		GRUNDFOS	UPS 40-160	
CP-05A	MECH ROOM	MECH ROOM AHU	25	14	WATER	INLINE	1,750	2	1/2	115	1		GRUNDFOS	UPS 40-80/4	SERVES AHU COILS & DISTRIBUTED UNIT HEATERS
CP-05B	MECH ROOM	MECH ROOM AHU	25	14	WATER	INLINE	1,750	2	1/2	115	1		GRUNDFOS	UPS 40-80/4	SERVES AHU COILS & DISTRIBUTED UNIT HEATERS

No.	Date	Item
REVISIONS		

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CONSULTANT :



PROJECT :

MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT

2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508

SHEET TITLE :

SCHEDULES

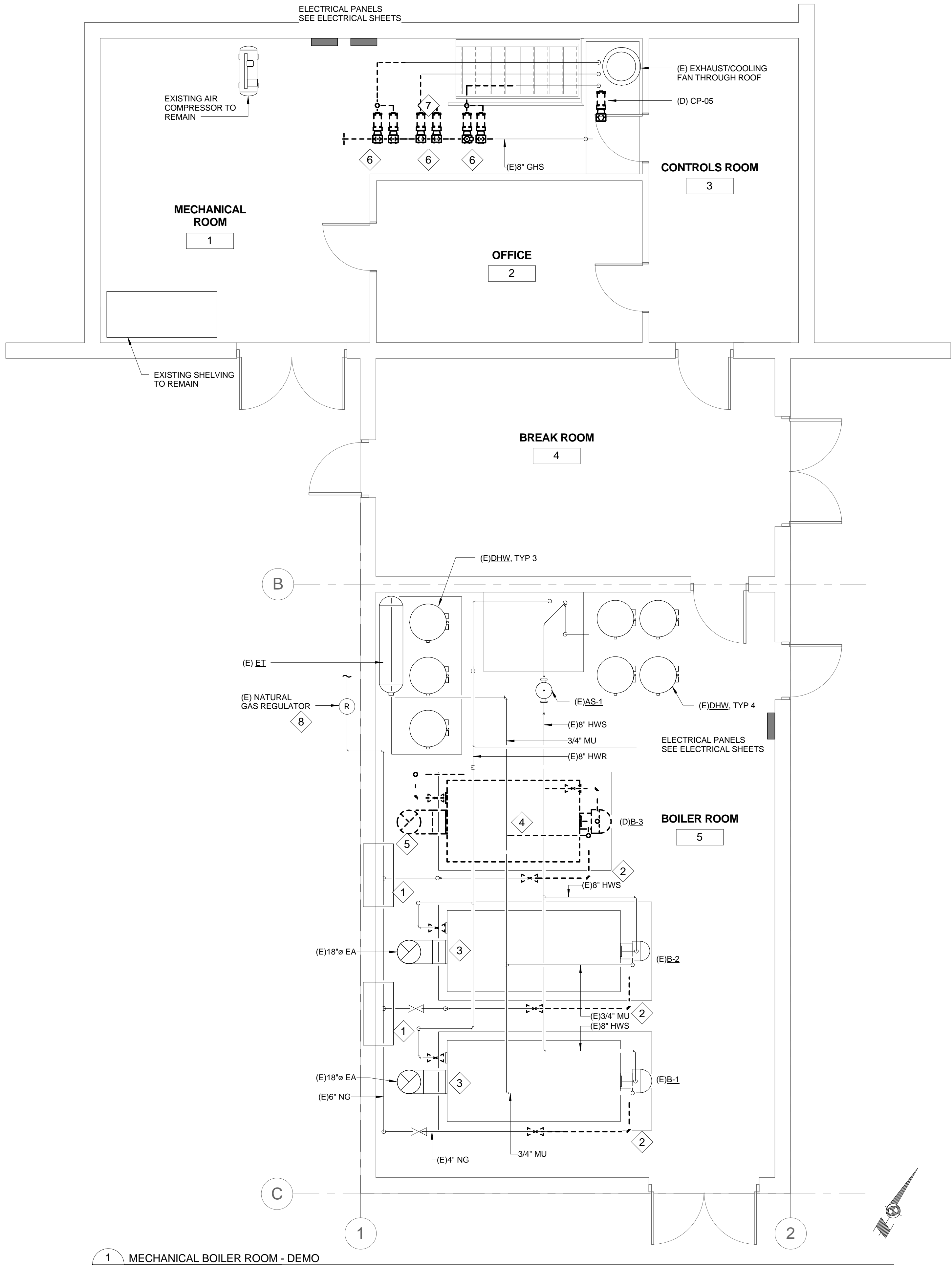
100% CONSTRUCTION
DOCUMENTS

DESIGN	DA
DRAWN	CSB
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PROJECT No.
ANC 17-27C

SHEET NUMBER

M004



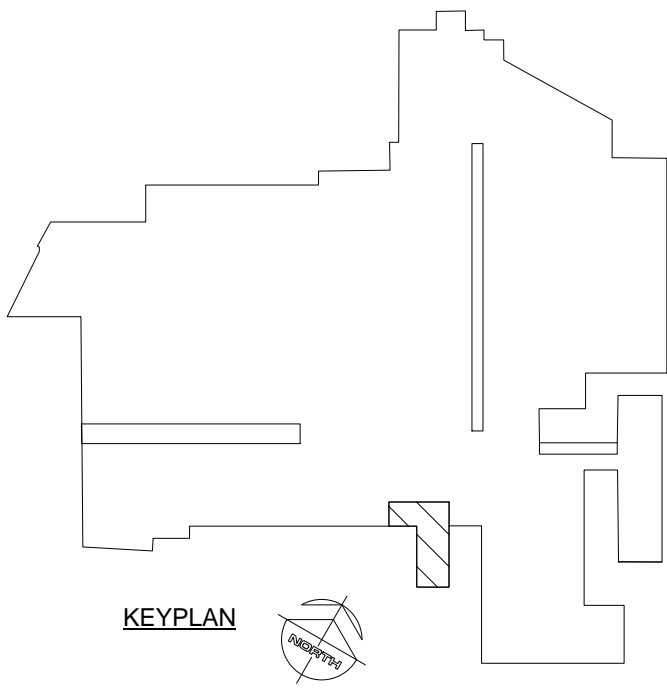
1 MECHANICAL BOILER ROOM - DEMO
M101 1/4" = 1'-0"

SHEET NOTES

- ONE BOILER SHALL REMAIN OPERATIONAL AT ALL TIMES FOR FACILITY DOMESTIC HOT WATER PRODUCTION.
- ISOLATE AND DISCONNECT NATURAL GAS SERVICE TO BOILER ROOM PRIOR TO DISMANTLING NATURAL GAS TRAIN. PHASE DISCONNECTION AND DEMOLITION OF GAS PIPING TO ACCOMMODATE BOILER OPERATION FOR DOMESTIC HOT WATER PRODUCTION.
- FOR DEMO BOILER PIPING DIAGRAM, SEE 3/M301.
- FIRE PROTECTION SYSTEM, DOMESTIC WATER SYSTEM, VENTILATION SYSTEM, AND OTHER SYSTEMS IN EXISTING SPACE NOT RELATED TO THE HYDRONIC HEATING BOILERS SHALL REMAIN FOR CONTINUED USE.
- McLAUGHLIN YOUTH CENTER MAINTENANCE DEPARTMENT RETAINS RIGHT OF SALVAGE FOR ALL DEMOLISED COMPONENTS. COORDINATE WITH MYC MAINTENANCE FOR THE FOLLOWING:
 - BOILER B-3 CAST IRON SECTIONS
 - NATURAL GAS BURNERS
 - NATURAL GAS SAFETIES AND ISOLATION VALVES
 - ALL PUMPS
 - BALANCE VALVES, CHECK VALVES, AND HYDRONIC ISOLATION VALVES
 - ALL OTHER COMPONENTS PERMITTED TO BE DEMOLISHED WITHOUT SALVAGE COORDINATION.
- CONTRACTOR SHALL THOROUGHLY REVIEW EXISTING SITE CONDITIONS AND EXISTING INSTALLATION PRIOR TO BEGINNING WORK.

SHEET KEY NOTES

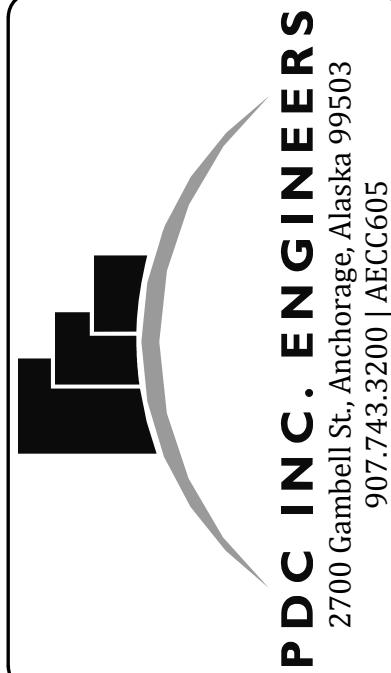
- DEMOLISH ACTUATOR AND CONTROL TO LOWER COMBUSTION AIR DAMPER ACTUATOR. EXISTING DAMPER TO REMAIN.
- DEMOLISH NATURAL GAS TRAIN SERVING EACH BURNER INCLUDING ALL GAS ISOLATION VALVES, SAFETIES, AND CONTROLS. SEE DEMO GAS PIPING DIAGRAM 1/M301.
- REFURBISH BOILERS B-1 AND B-2. DEMOLISH RETURN ISOLATION VALVES, BURNER, SAFETIES, AND CONTROLS. EXISTING HOUSEKEEPING PAD TO REMAIN, FOR RE-USE.
- DEMOLISH BOILER B-3, BOILER FLUE, BURNER, CONTROLS, AND ALL ASSOCIATED APPURTENANCES. DEMOLISH B-3 PIPING BACK TO HEADERS AS NECESSARY FOR NEW INSTALLATION. DEMOLISH BOILER ISOLATION VALVES. EXISTING HOUSEKEEPING PAD TO REMAIN.
- DEMOLISH BOILER B-3 STACK UP TO EXISTING ROOF PENTRATION, ROOF CAP, ROOF STACK, STACK SUPPORTS, AND ROOFING SYSTEM TO REMAIN. REUSE (E) BOILER STACK AT ROOF PENETRATION.
- DEMOLISH PUMPS AND SUPPLY HEADER BACK TO MAIN AS NECESSARY FOR NEW INSTALLATION. DEMOLISH PUMP ISOLATION VALVES, BALANCE VALVES, CONTROLS, AND ASSOCIATED APPURTENANCES. SEE 1/M302.
- DEMOLISH ALL MOTORS IN PUMP SET. 4 MOTORS PIPED IN A SERIES PUMP SET.
- DEMOLISH GAS REGULATOR. EXISTING GAS PIPE TO WITHIN BOILER ROOM TO REMAIN. REPLACE GAS PIPING WITHIN BOILER ROOM TO ACCOMMODATE NEW NATURAL GAS TRAINS AND SAFETIES. SEE 1/M301.



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CONSULTANT :



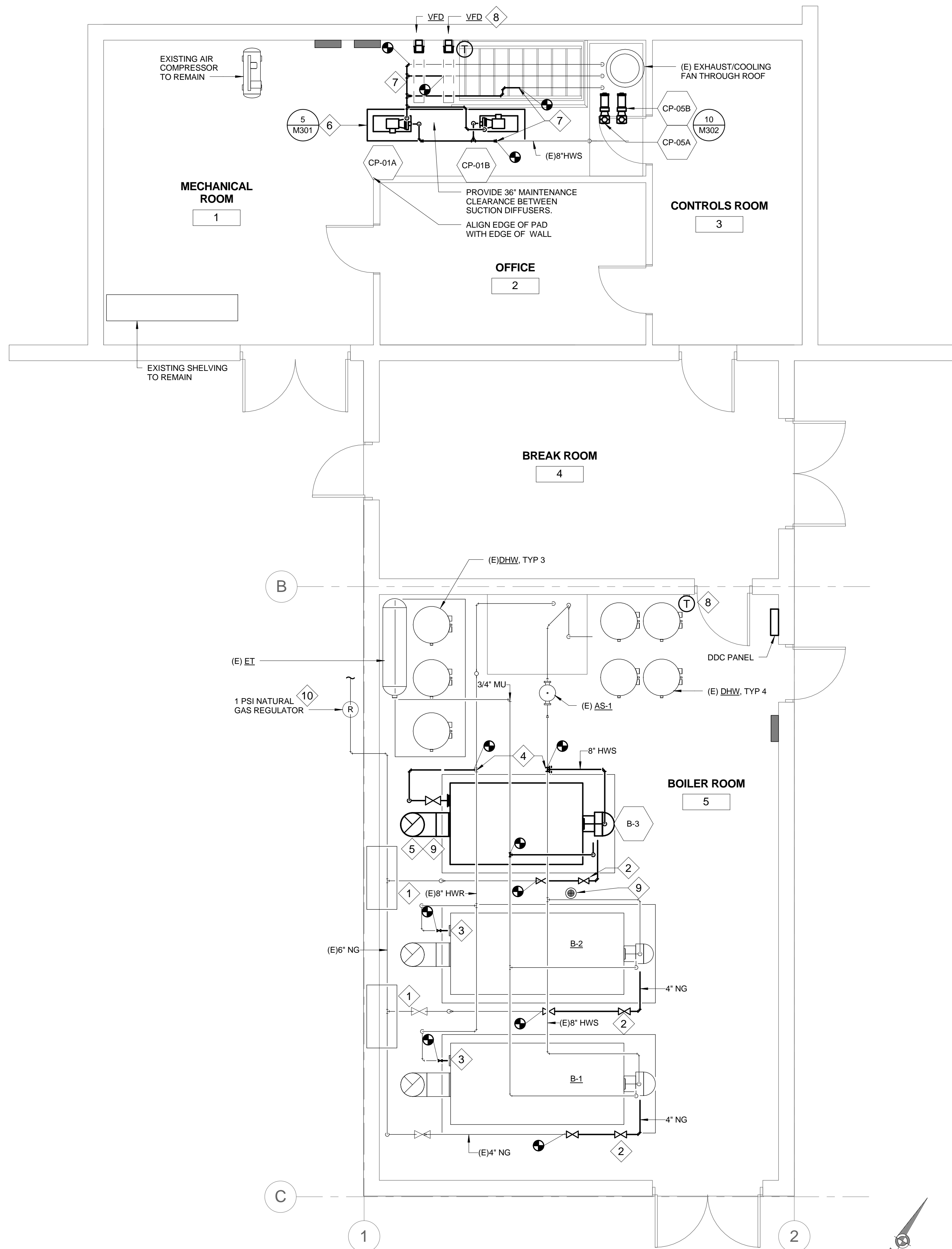
PROJECT :
**McLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**
**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :
**MECHANICAL BOILER
ROOM - DEMO**
**100% CONSTRUCTION
DOCUMENTS**

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CHECKED CDF
DATE 02/09/2017

PROJECT No.
ANC 17-27C
SHEET NUMBER

M101



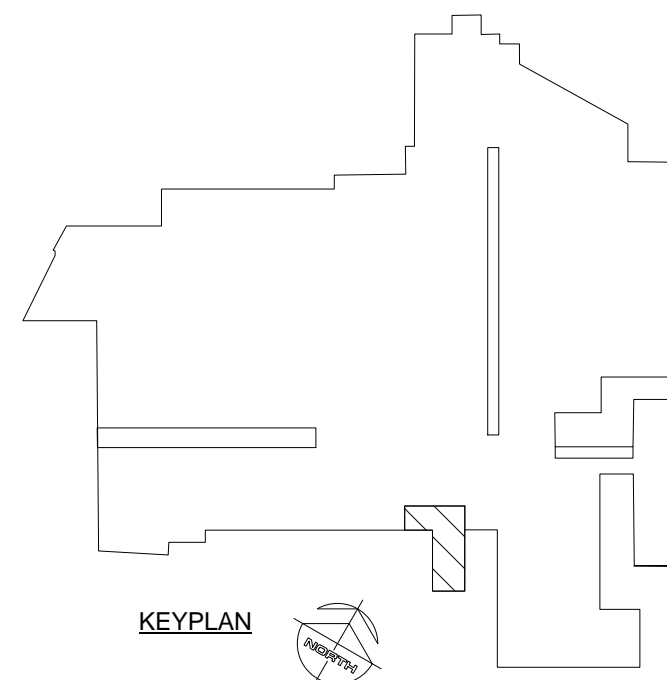
1 MECHANICAL BOILER ROOM - NEW
1/4" = 1'-0"

SHEET NOTES

- ONE BOILER SHALL OPERATE AT ALL TIMES FOR FACILITY DOMESTIC HOT WATER PRODUCTION.
- PROVIDE GLYCOL SAMPLING AND TESTING TO OWNER PRIOR TO CONSTRUCTION. FILTER AND STORE REMOVED GLYCOL AND REUSE.
- MAINTAIN EXISTING MAINTENANCE CLEARANCES AROUND REFURBISHED BOILERS B-1 & B-2. MINIMUM 24" MAINTENANCE CLEARANCE AROUND NEW BOILER B-3.
- CONTRACTOR SHALL PERFORM FINAL BOILER STACK SIZING CALCULATIONS AND SHALL INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- PROVIDE NEW BOILER CONTROLS. DDC SHALL MONITOR TEMPERATURES AND PROVIDE REMOTE HWS SETPOINT, SEE M003. FOR SENSOR LOCATIONS SEE 4/M301.
- CONTRACTOR SHALL THOROUGHLY REVIEW EXISTING SITE CONDITIONS AND EXISTING INSTALLATION PRIOR TO BEGINNING WORK.

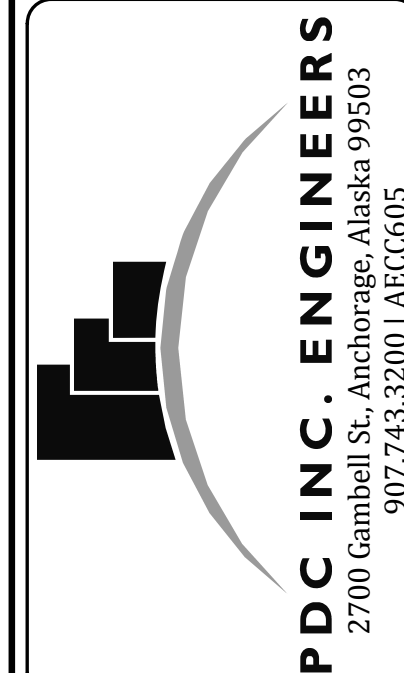
SHEET KEY NOTES

- PROVIDE ROOM TEMPERATURE SENSOR, MODULATING DAMPER ACTUATORS, AND ASSOCIATED CONTROLS TO CONTROL LOWER COMBUSTION AIR DAMPER ACTUATOR.
- INSTALL ALL NATURAL GAS ISOLATION VALVES AND SAFETIES PARALLEL TO LONG EDGE OF BOILER TO FACILITATE MAINTENANCE CLEARANCE FOR BURNER SERVICING. SEE GAS PIPING DIAGRAM 2/M301.
- REFURBISH BOILERS B-1 & B-2 INCLUDING: SECTION GASKETS, BURNER, CONTROLS, GAS TRAIN, SAFETIES, AND JACKET INSULATION. PROVIDE RETURN ISOLATION VALVES FOR B-1 AND B-2. SEE BOILER PIPING DIAGRAM 4/M301.
- PROVIDE NEW BOILER BRANCH PIPING FROM BOILER B-3 TO HEADER. SEE BOILER PIPING DIAGRAM 4/M301.
- PROVIDE NOMINAL 14"Ø DOUBLE-WALL STACK TO SERVICE B-3. ROUTE THROUGH EXISTING ROOF PENETRATION AND ROOF STACK. SEE BOILER STACK PENETRATION DIAGRAM 7/M301. CONTRACTOR AND STACK MANUFACTURER SHALL DETERMINE FINAL STACK SIZE.
- PROVIDE HOUSEKEEPING PAD FOR NEW PUMP INSTALLATION. SEE DETAIL 5/M301.
- RECONFIGURE HWS HEADER PIPING TO ACCOMMODATE NEW PUMPS. CONNECT PUMP DISCHARGE INTO EXISTING HWS ZONE PIPING, SEE 2/M302.
- PROVIDE DDC TEMPERATURE SENSOR TO SERVE MECHANICAL ROOM EXHAUST FAN. PROVIDE DDC CONTROLS. SEE SEQUENCE OF OPERATIONS. SEE ELECTRICAL FOR DISCONNECT REQUIREMENTS.
- PROVIDE CONDENSATE RECEIVER WITH NEUTRALIZER. ROUTE CONDENSATE PIPING FROM BOILER TO FLOOR DRAIN. SEE BOILER PIPING DIAGRAM 4/M301.
- REGULATOR TO PROVIDE 28 IN.WG. (1PSIG) TO BOILER ROOM, SEE 2/M301.



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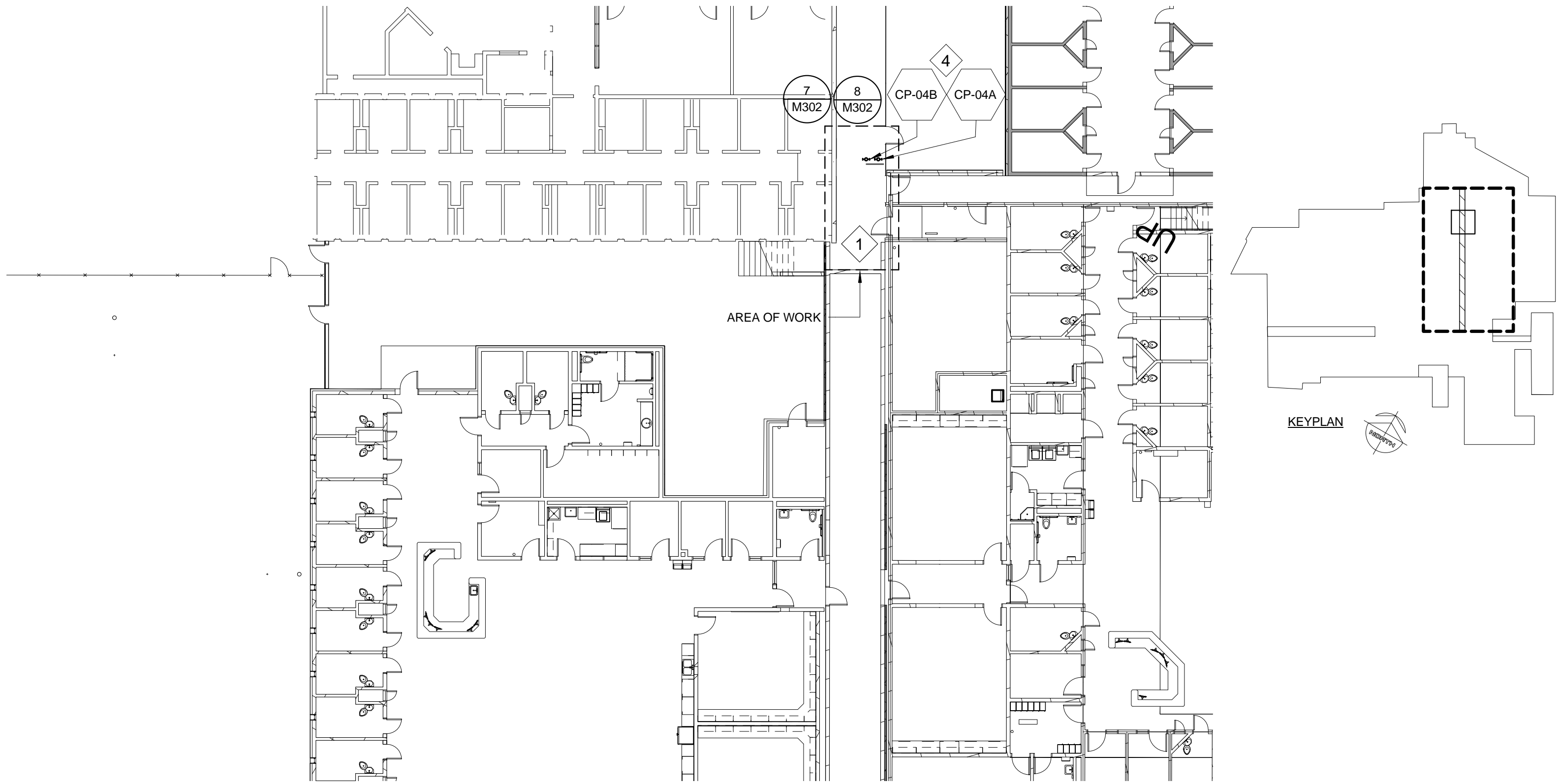
PROJECT :
**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**
2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508

SHEET TITLE :
**MECHANICAL BOILER
ROOM - REFURBISH
100% CONSTRUCTION
DOCUMENTS**

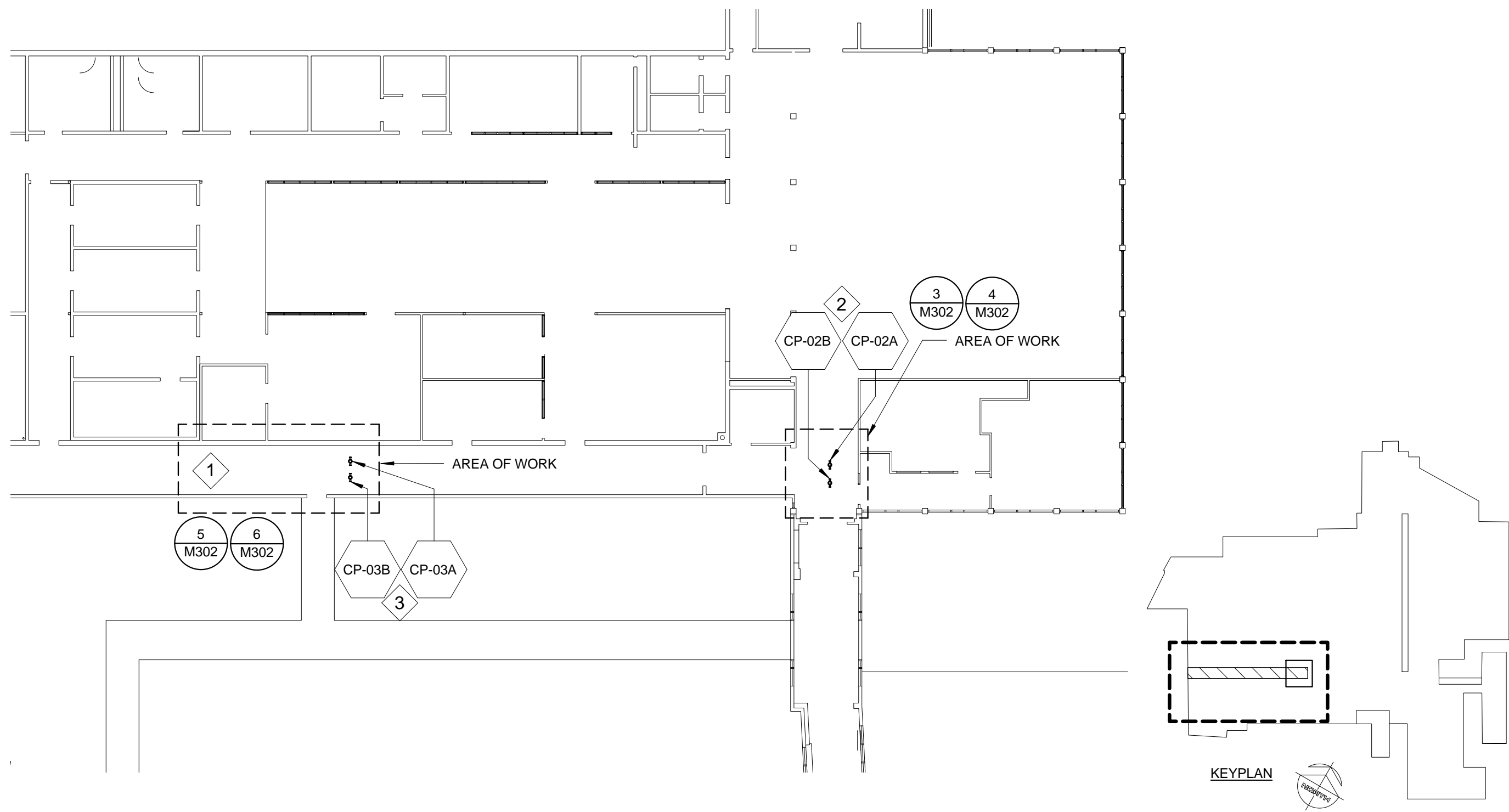
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DATE	02/09/2017

PROJECT No.
ANC 17-27C
SHEET NUMBER

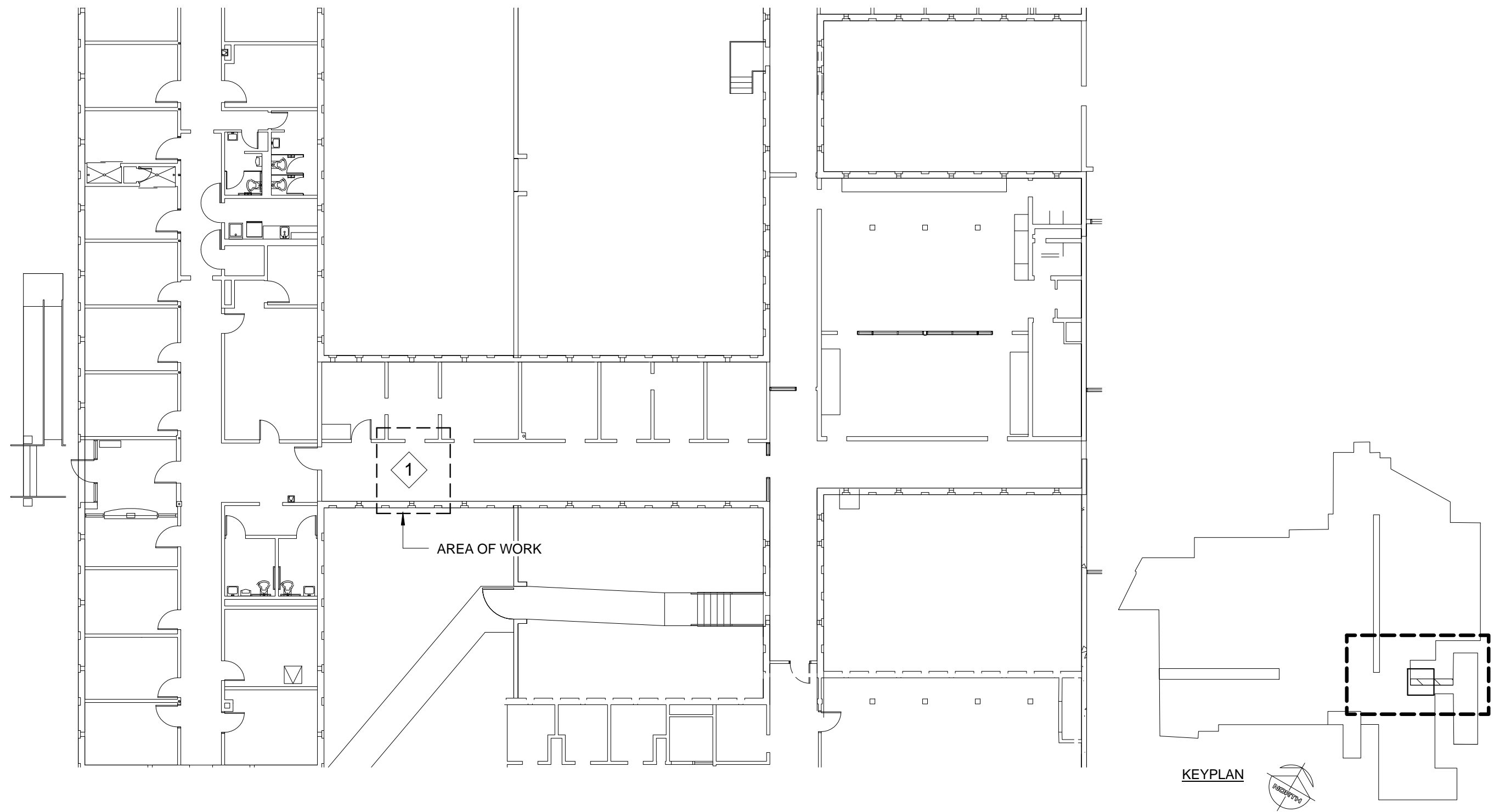
M201



1 GYM BOOSTER PUMP
M202 1/16" = 1'-0"



3 KITCHEN BOOSTER PUMPS
M202 1/16" = 1'-0"



2 PROBATION AREA
M202 1/16" = 1'-0"

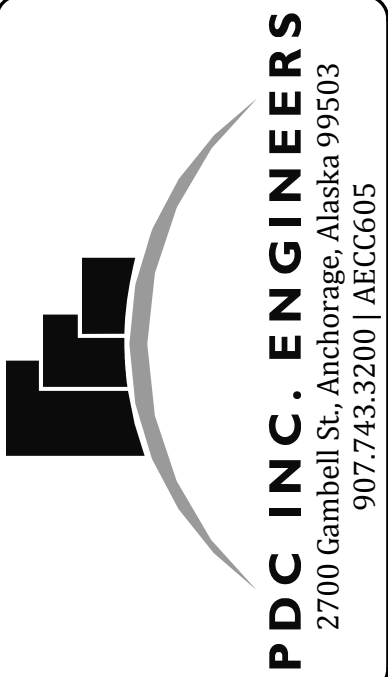
SHEET NOTES

1. DEMOLISH PUMPS, PIPING, AND CONTROLS AS INDICATED ON SHEET M302.

SHEET KEY NOTES

- 1 HYDRONIC SYSTEM, DIFFERENTIAL PRESSURE SENSOR LOCATION. FIELD LOCATE ON ZONE PIPING MAINS. TOTAL OF 3.
- 2 FOR CP-2A AND CP-2B SEE 3/M302 & 4/M302.
- 3 FOR CP-3A AND CP-3B SEE 5/M302 & 6/M302..
- 4 FOR CP-4A AND CP-4B SEE 7/M302 & 8/M302..

CONSULTANT :



PROJECT :
**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**
**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :
**MECHANICAL - BOOSTER
PUMPS**
**100% CONSTRUCTION
DOCUMENTS**

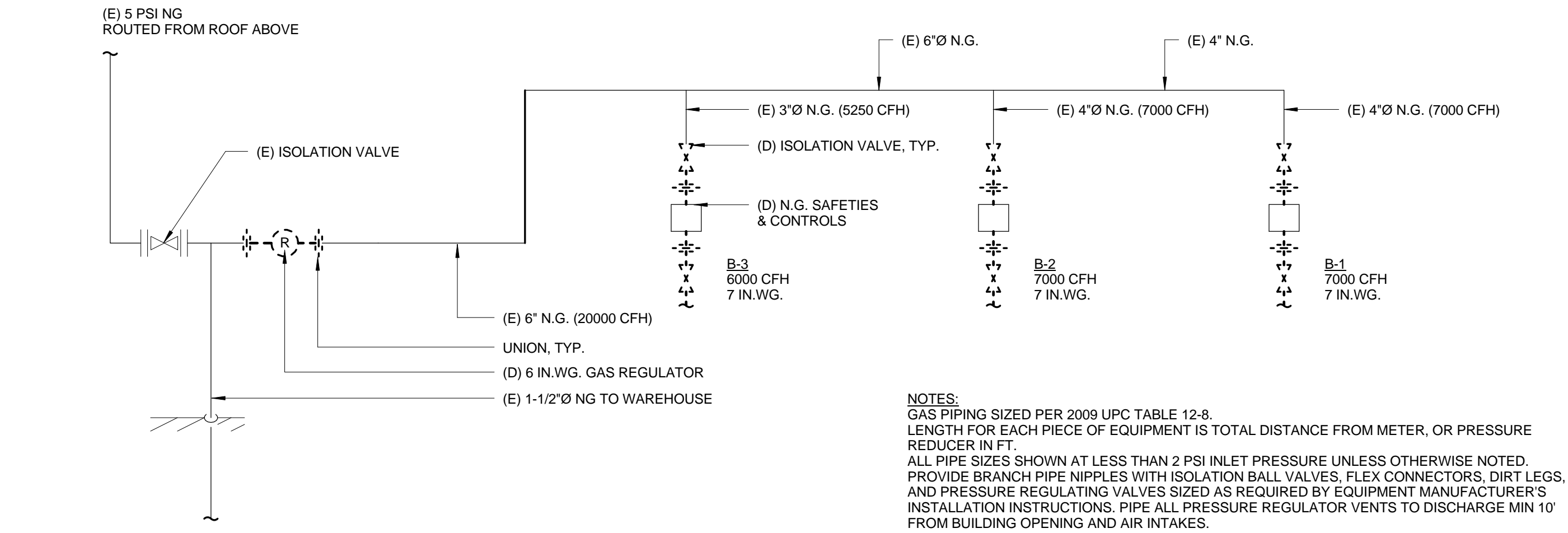
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DATE 02/09/2017

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SHEET NUMBER

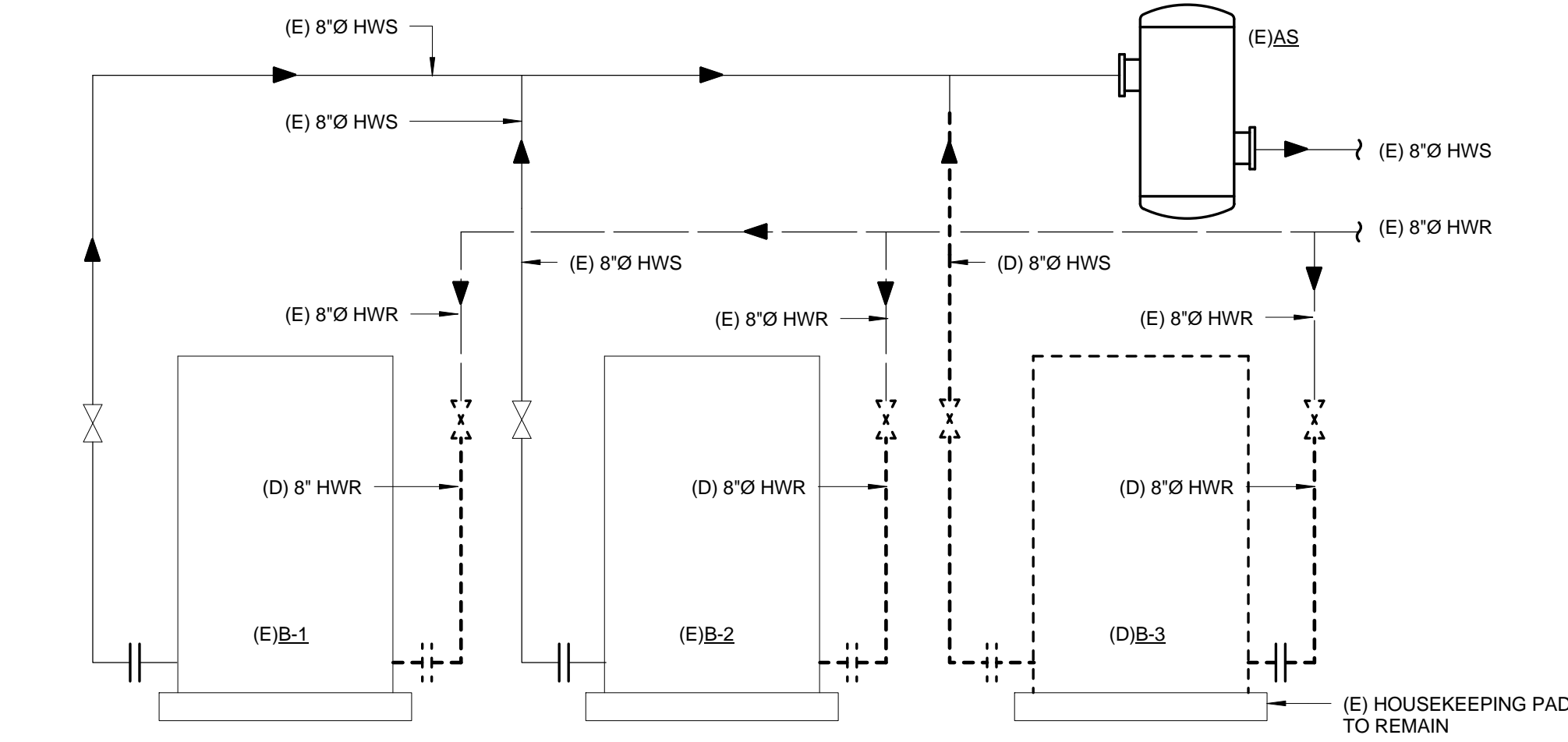
M202

No.	Date	Item
REVISIONS		

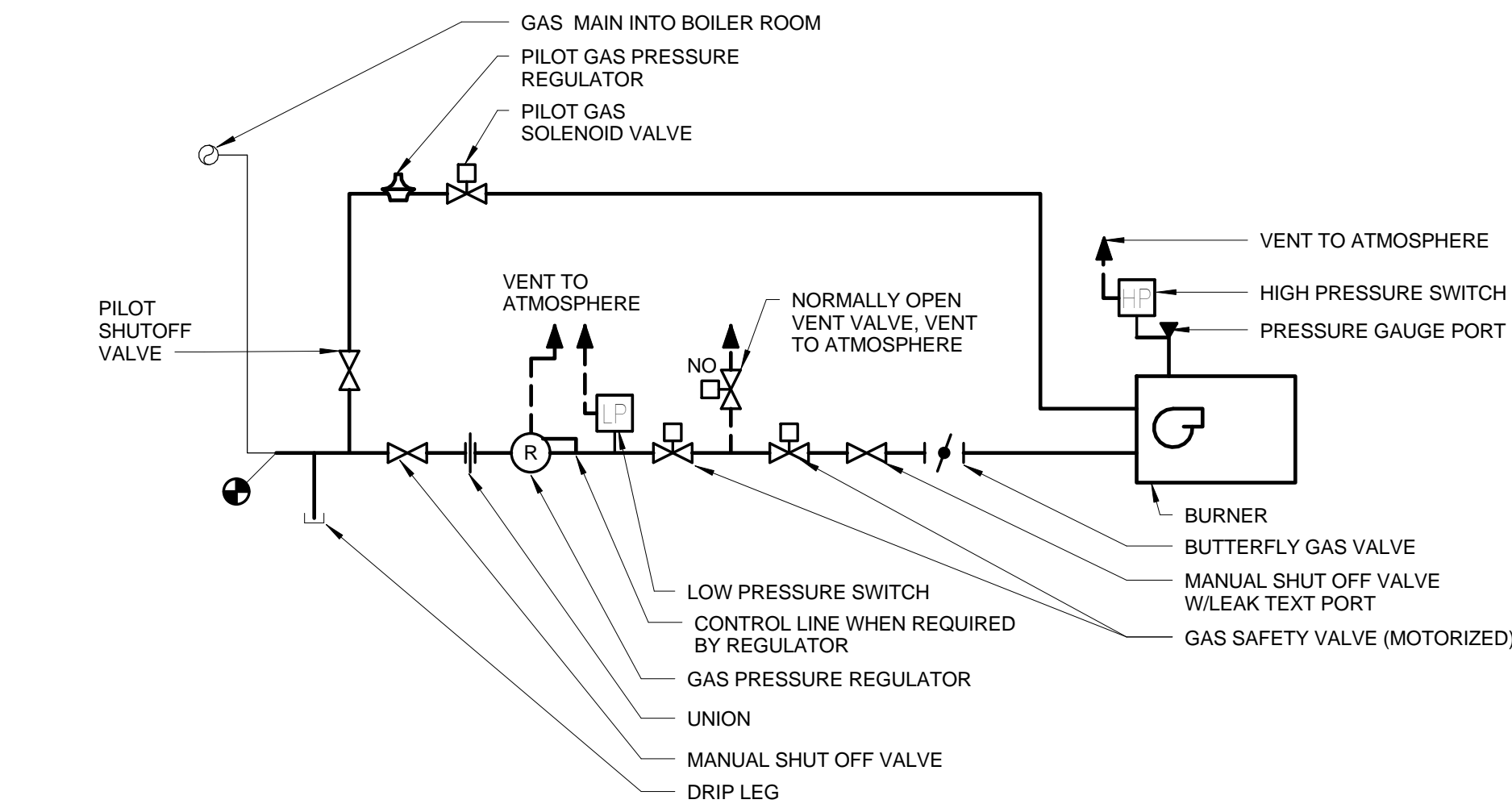
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1 NATURAL GAS PIPING DIAGRAM - DEMO
NO SCALE

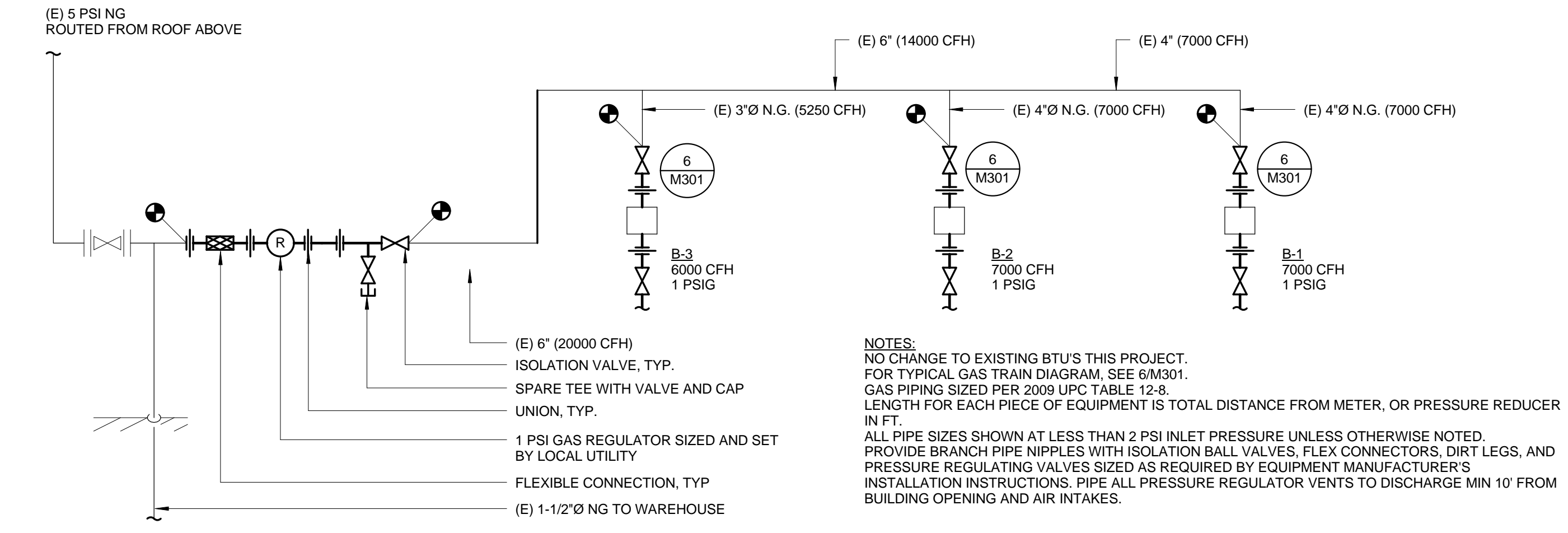


3 DEMO - BOILER PIPING DIAGRAM
NO SCALE

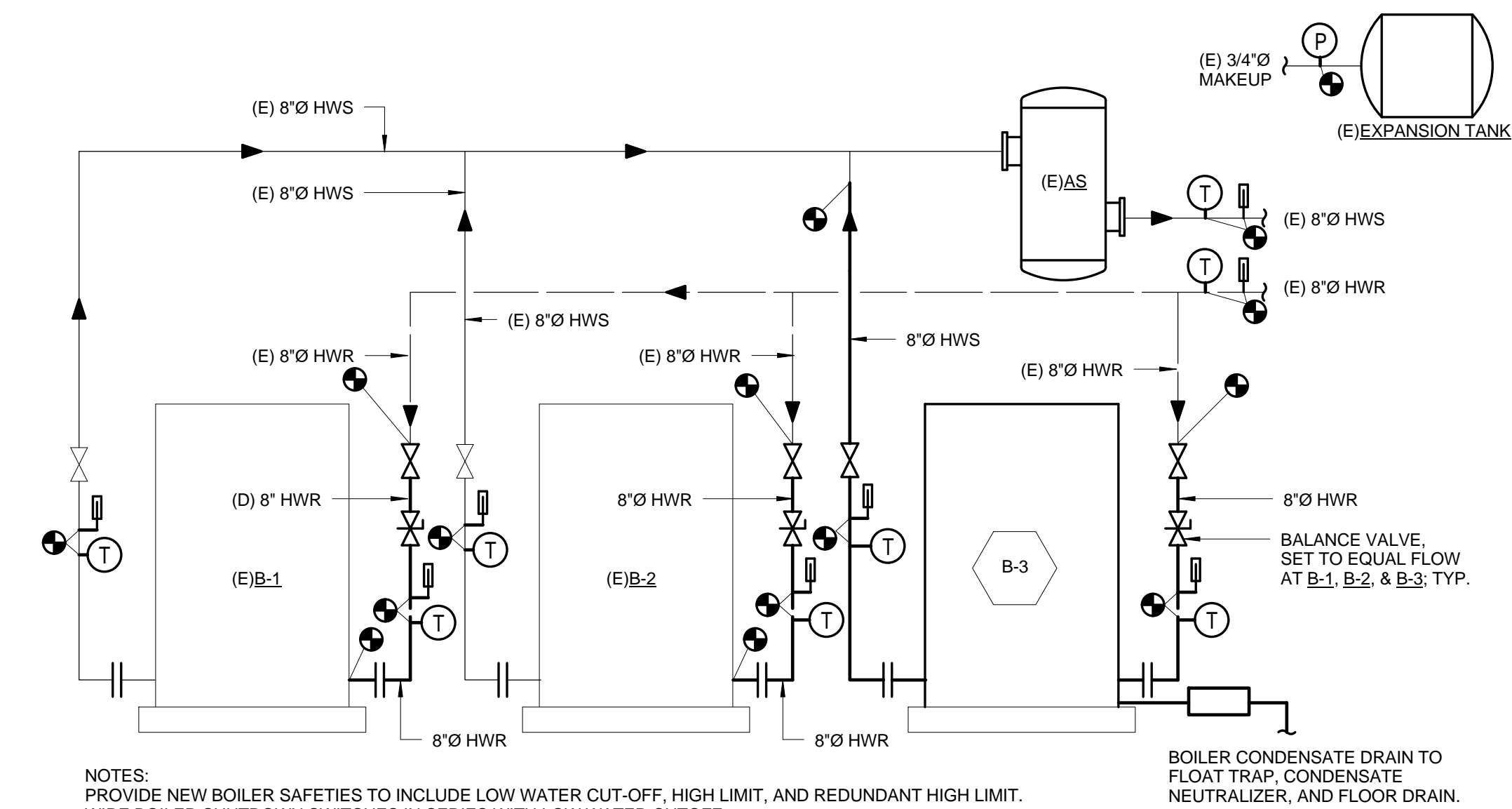


NOTES:
1. CONFORM TO MOST RIGOROUS REQUIREMENTS OF UL, FM, AND IRI NATURAL GAS PIPING REQUIREMENTS.
2. INSTALL IN CONFORMANCE TO MANUFACTURER'S RECOMMENDATIONS.

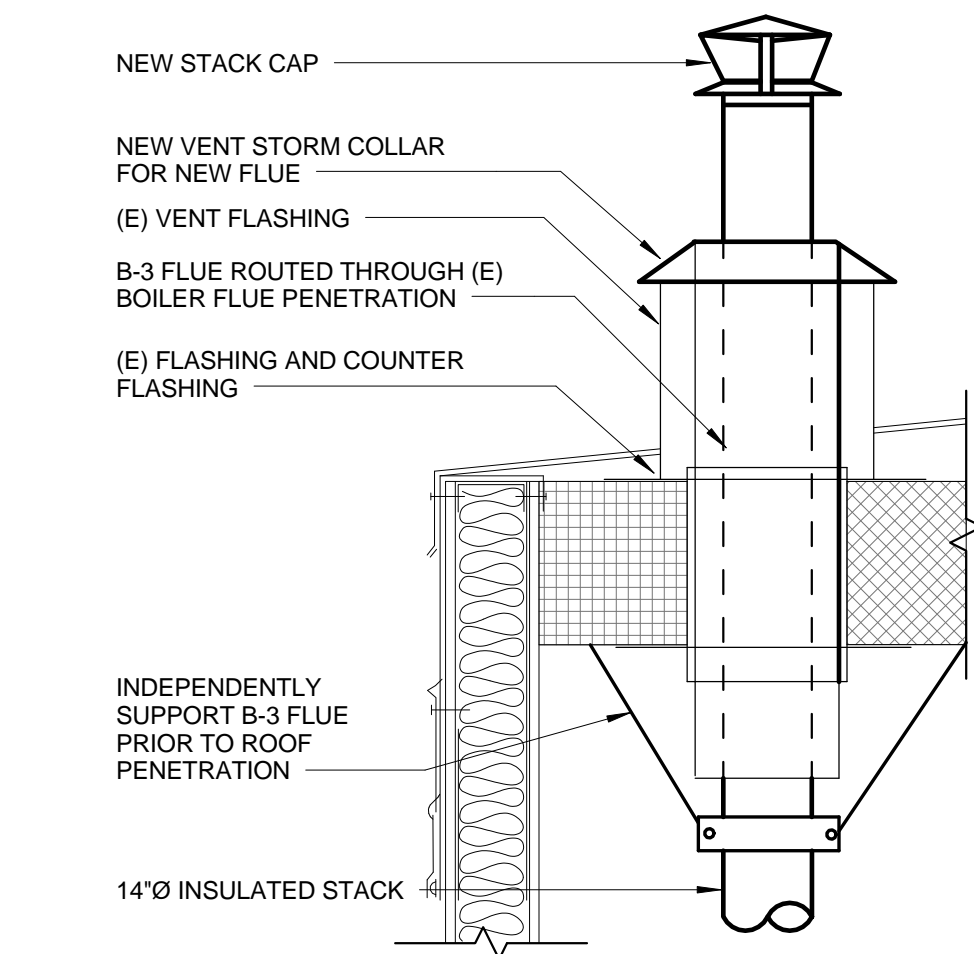
6 NATURAL GAS TRAIN
NO SCALE



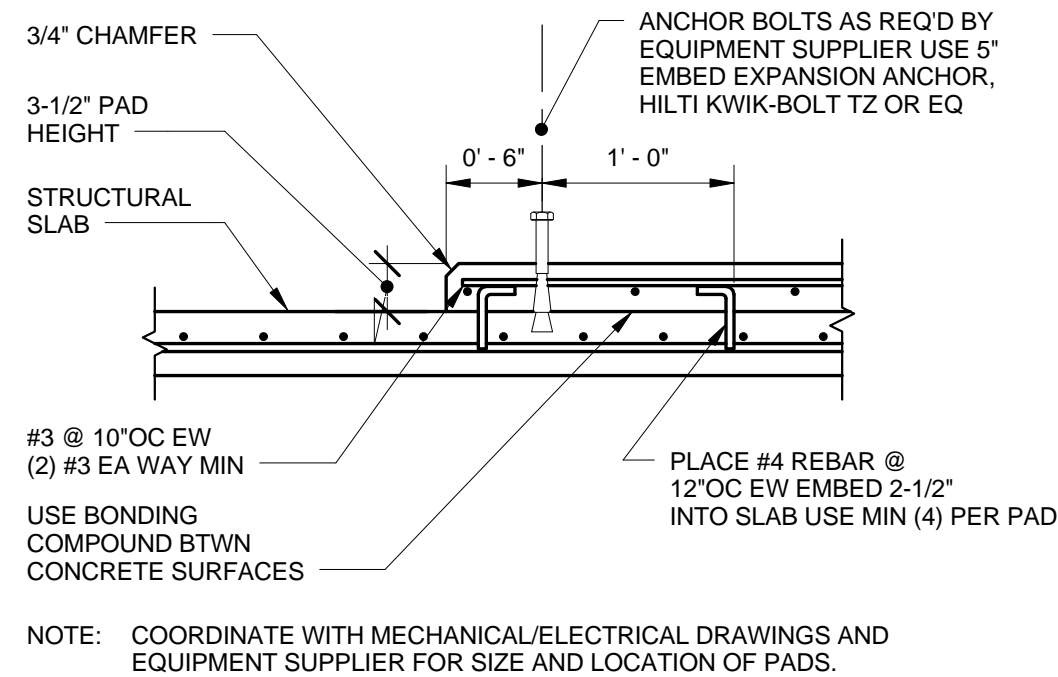
2 NATURAL GAS PIPING DIAGRAM - NEW
NO SCALE



4 NEW - BOILER PIPING DIAGRAM
NO SCALE



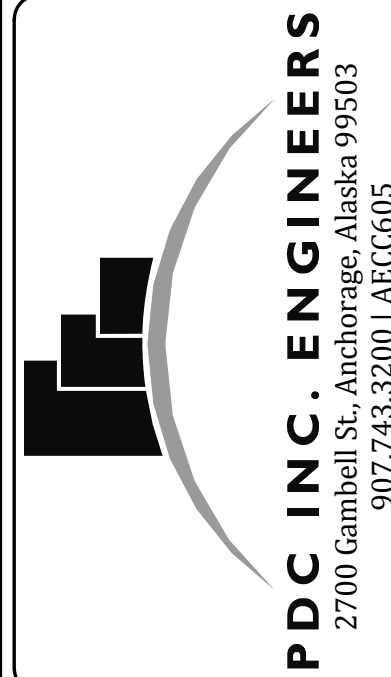
7 B-3 BOILER STACK CHASE PENETRATION DETAIL
NO SCALE



5 HOUSEKEEPING PAD DETAIL
NOT TO SCALE

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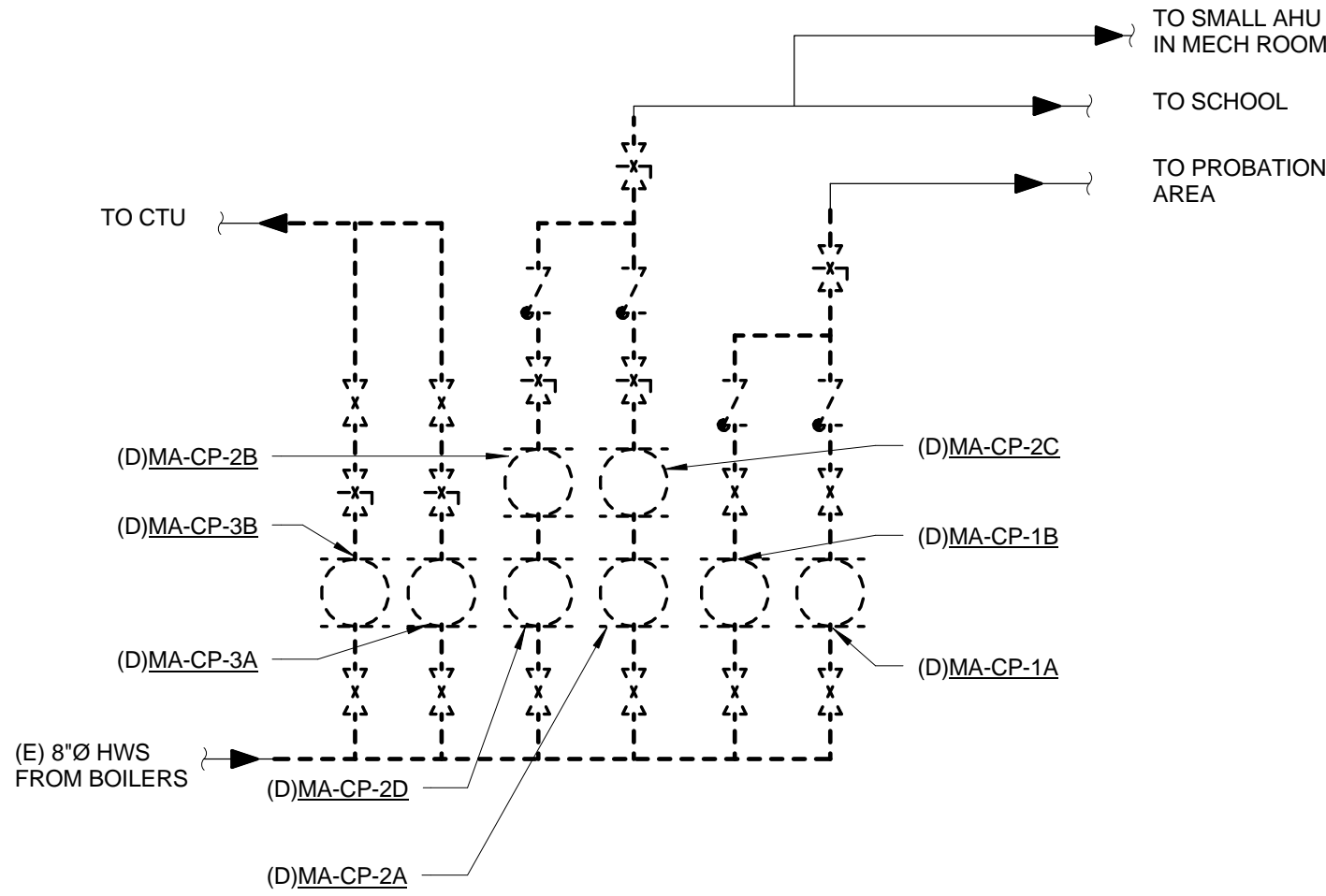
PROJECT :
**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**
**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :
**MECHANICAL DETAILS
AND DIAGRAMS**
**100% CONSTRUCTION
DOCUMENTS**

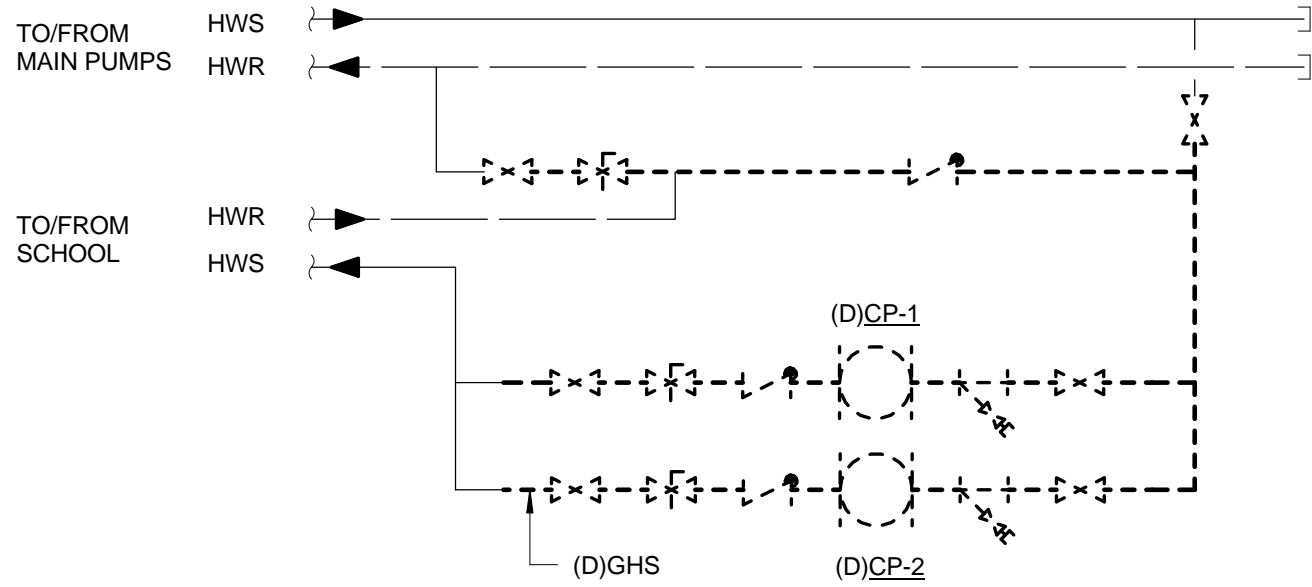
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PROJECT No.
ANC 17-27C
SHEET NUMBER

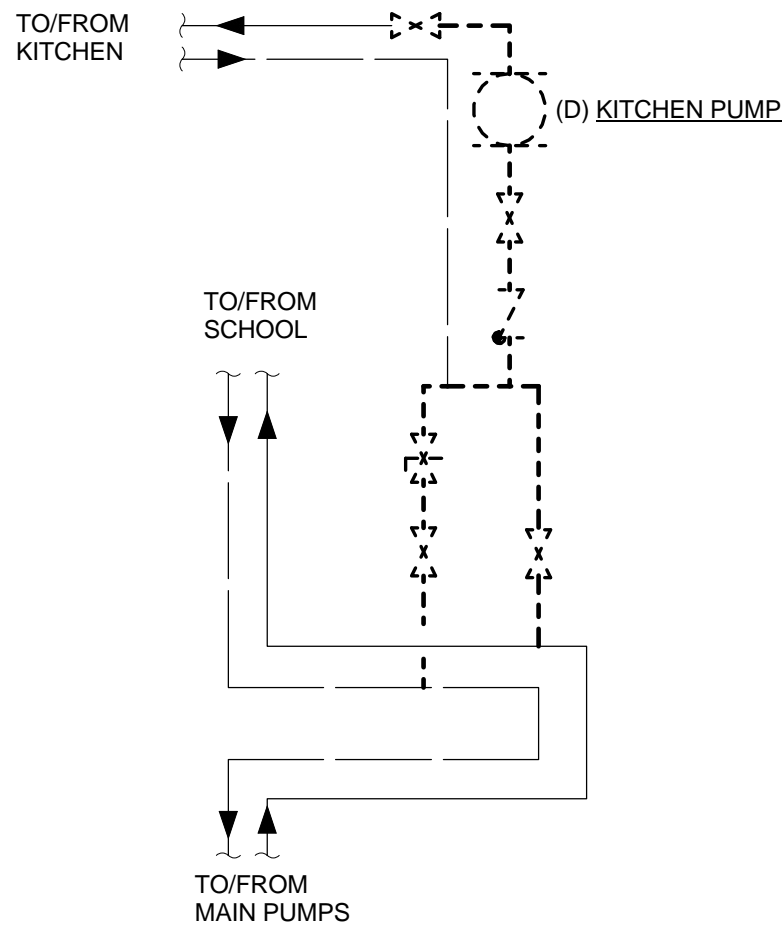
M301



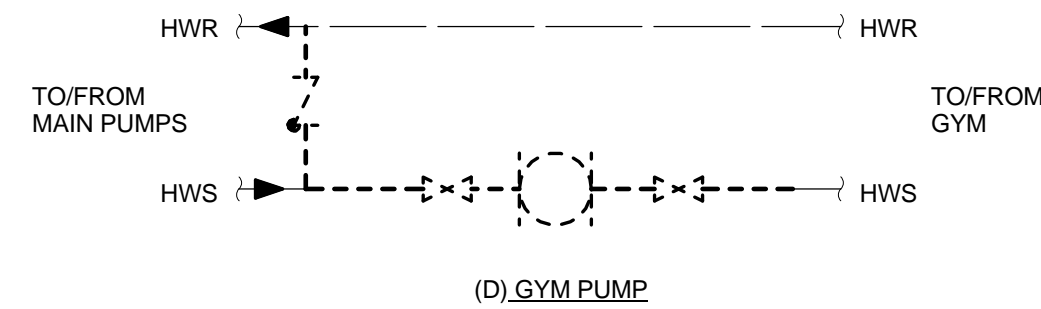
1 DEMO - ZONE PUMP TREE DIAGRAM
NO SCALE



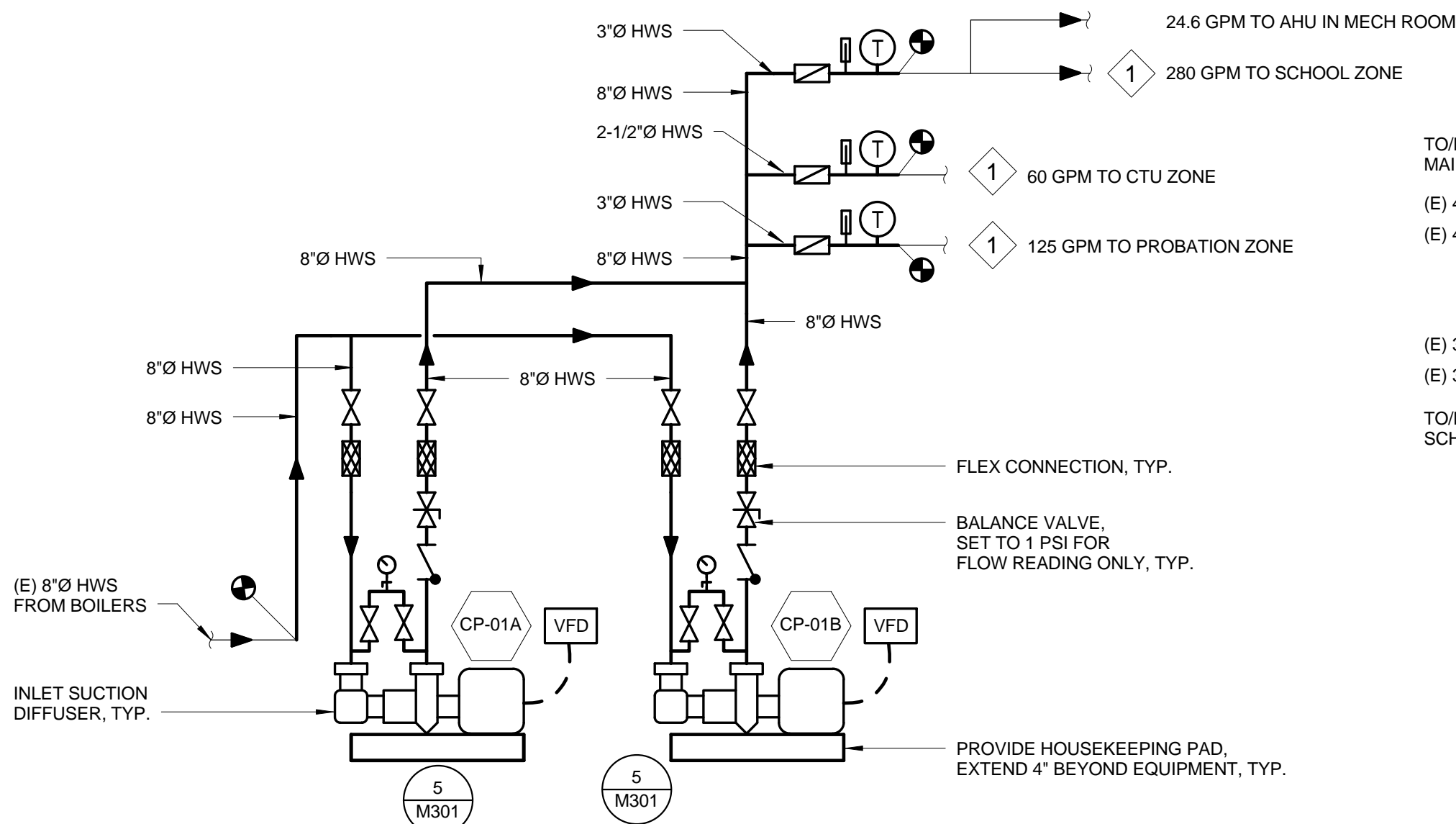
3 DEMO - SCHOOL BOOSTER PUMPS (CP-1 & CP-2)
NO SCALE



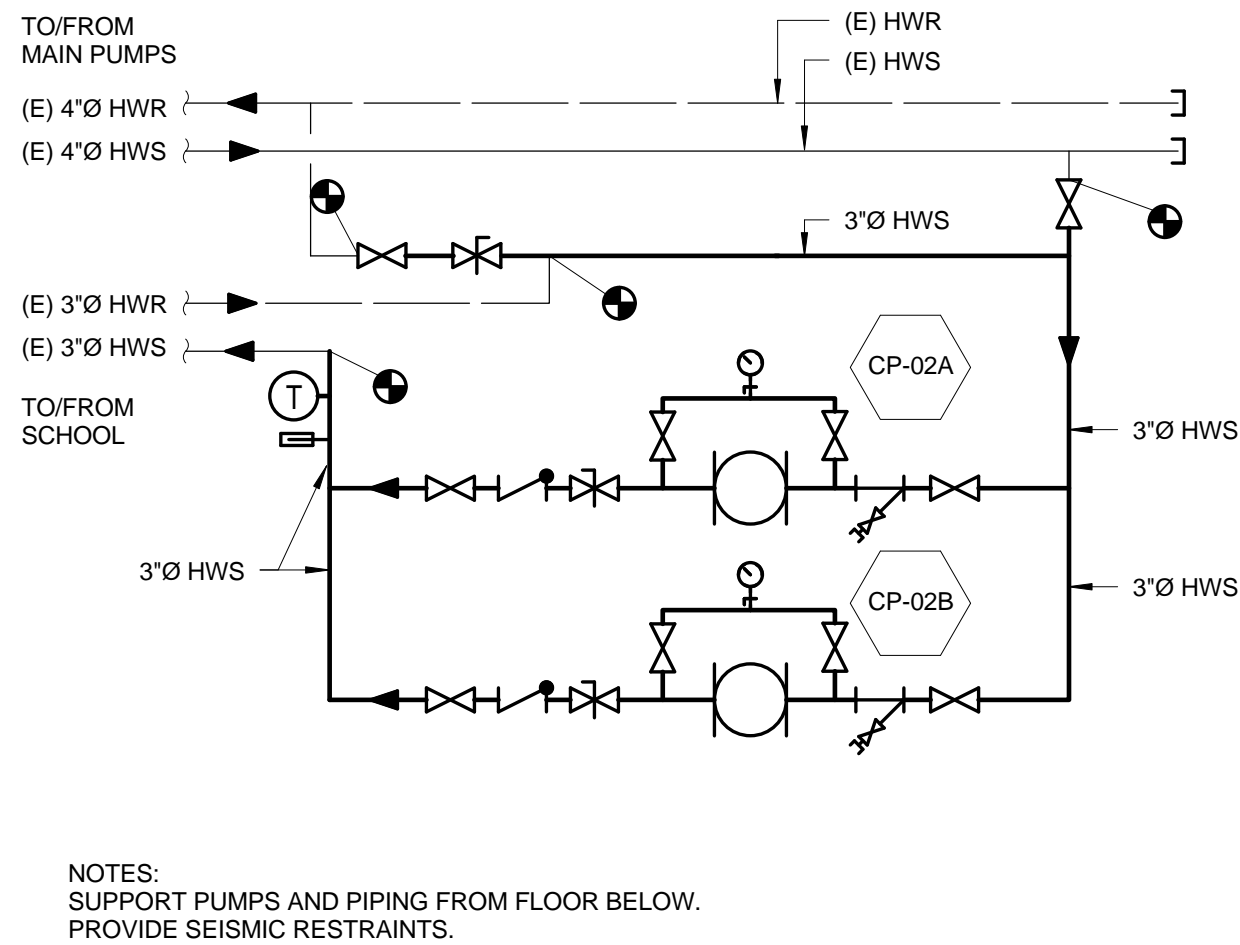
5 DEMO - KITCHEN PUMP DIAGRAM (CP-4C)
NO SCALE



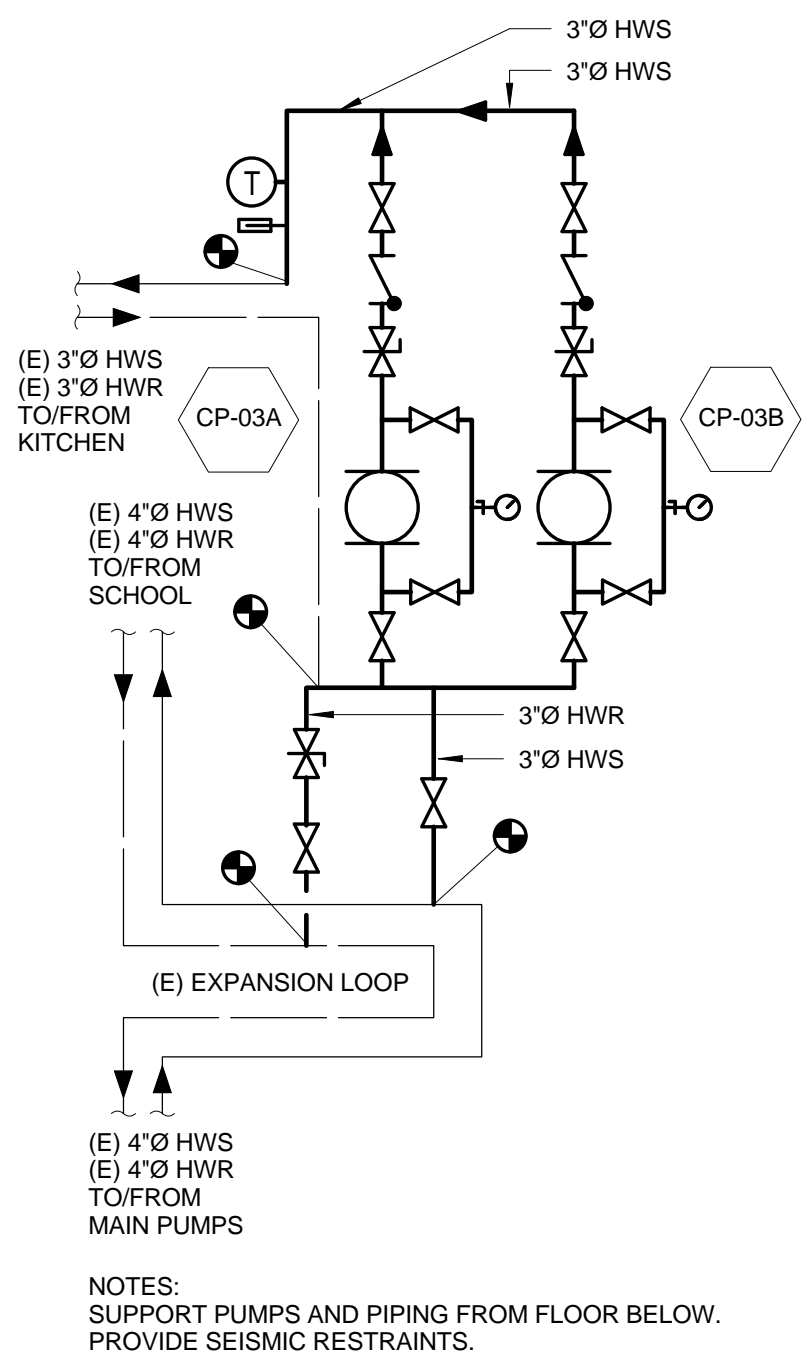
7 DEMO - GYM BOOSTER PUMP DIAGRAM
NO SCALE



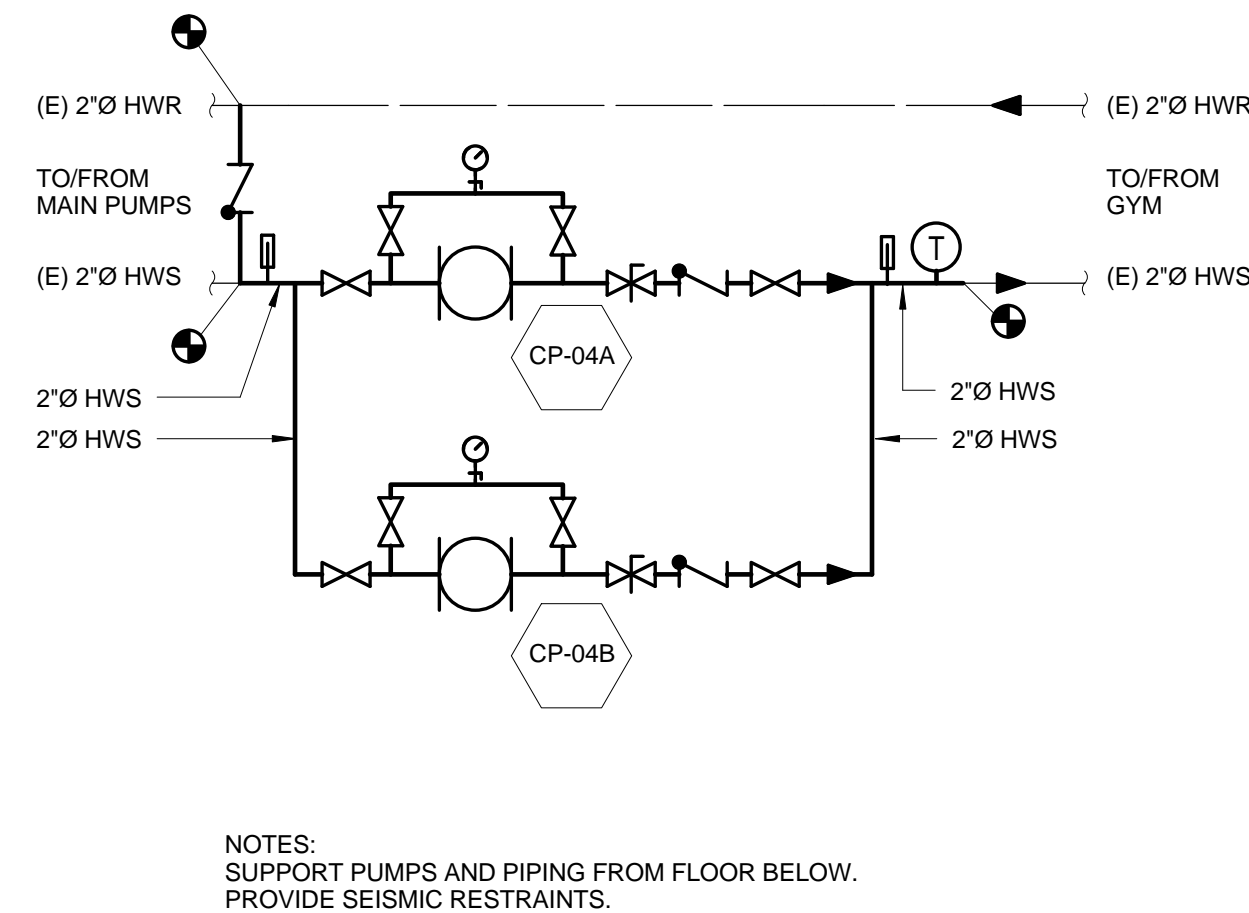
2 NEW - PUMPS CP-01A & CP-01B
NO SCALE



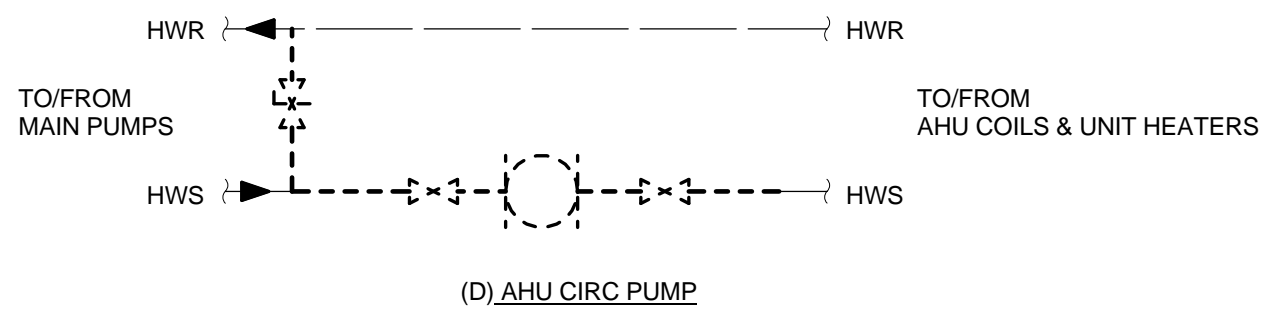
4 NEW - SCHOOL BOOSTER PUMPS (CP-02A & CP-02B)
NO SCALE



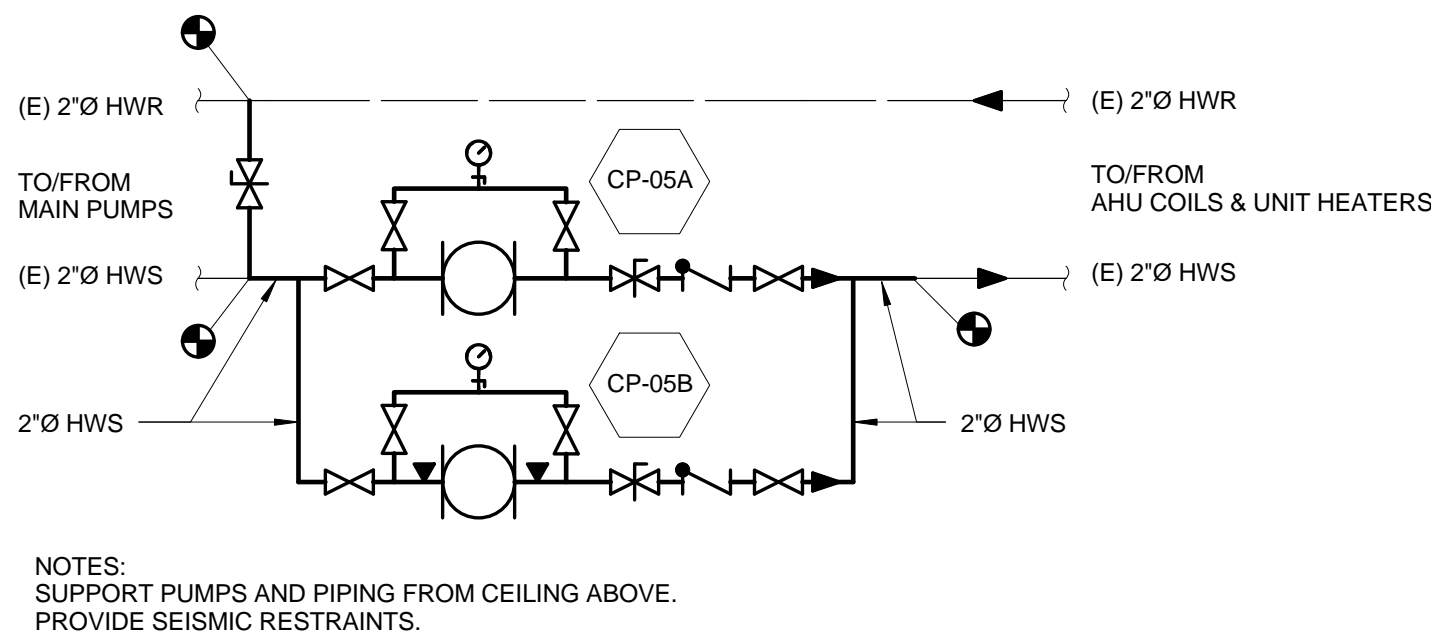
6 NEW - KITCHEN PUMP DIAGRAM (CP-03A & CP-03B)
NO SCALE



8 NEW - GYM BOOSTER PUMP DIAGRAM (CP-04A & CP-04B)
NO SCALE



9 DEMO - AHU CIRC PUMP DIAGRAM (CP-05)
NO SCALE



10 NEW - AHU CIRC PUMP DIAGRAM (CP-05A & CP-05B)
NO SCALE

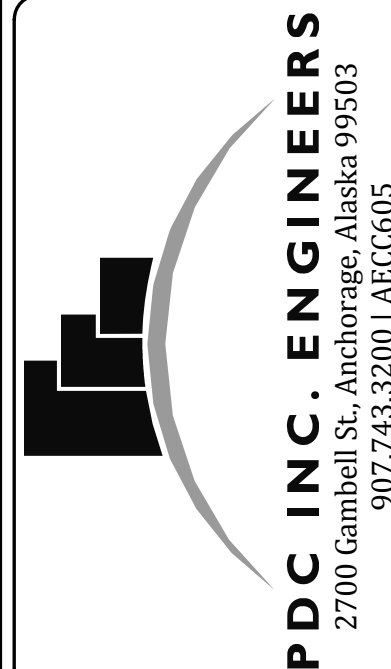
SHEET NOTES

- DEMO ALL PUMP CONTROL WIRING BACK TO LOCAL CONTROL PANEL, TYP.

SHEET KEY NOTES

- PROVIDE DIFFERENTIAL PRESSURE SENSOR. LOCATE AS SHOWN ON SHEET M202.

CONSULTANT :



PROJECT :
**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**
**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :
**MECHANICAL DETAILS
AND DIAGRAMS**
**100% CONSTRUCTION
DOCUMENTS**




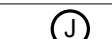






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PROJECT No.
ANC 17-27C
SHEET NUMBER

M302

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POWER & COMMUNICATION SYMBOLS	
	DIRECT DIGITAL CONTROL OUTLET
	MANUAL MOTOR STARTER
	EMERGENCY BOILER SHUTDOWN
	JUNCTION BOX
	NONFUSIBLE SWITCH
	COMBINATION MAGNETIC MOTOR STARTER AND DISCONNECT
	VARIABLE FREQUENCY CONTROLLER[DRIVE] [- FURNISHED BY OTHERS]
	MOTOR CONNECTION
	BRANCH-CIRCUIT PANELBOARD; RECESSED, SURFACE
	BRANCH CIRCUIT HOME RUN TO PANELBOARD; NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS, PANEL AND CIRCUIT AS SHOWN

MECHANICAL EQUIPMENT SCHEDULE							
TYPE MARK	DESCRIPTION	LOAD	HP	VOLTAGE	NUMBER OF POLES	CONNECTION TYPE	NOTES
(E)B-1		6300 VA		208 V	3	HARDWIRED	EXISTING EQUIPMENT TO REMAIN
(E)B-2		6300 VA		208 V	3	HARDWIRED	EXISTING EQUIPMENT TO REMAIN
B-3		6300 VA	5	208 V	3	HARDWIRED	PROVIDE NON-FUSED DISCONNECT SWITCH
CP-01A		17400 VA	15	208 V	3	HARDWIRED	FUSED DISCONNECT INTEGRAL TO VFD CONTROLS
CP-01B		17400 VA	15	208 V	3	HARDWIRED	FUSED DISCONNECT INTEGRAL TO VFD CONTROLS
CP-02A		6300 VA	5	208 V	3	HARDWIRED	EXISTING COMBINATION STARTER-DISCONNECT TO REMAIN
CP-02B		6300 VA	5	208 V	3	HARDWIRED	EXISTING COMBINATION STARTER-DISCONNECT TO REMAIN
CP-03A		864 VA	1/3	120 V	1	HARDWIRED	PROVIDE MANUAL MOTOR STARTER ON OR NEAR UNIT
CP-03B		864 VA	1/3	120 V	1	HARDWIRED	PROVIDE MANUAL MOTOR STARTER ON OR NEAR UNIT
CP-04A		1332 VA	3/4	208 V	3	HARDWIRED	PROVIDE NON-FUSED DISCONNECT SWITCH
CP-04B		1332 VA	3/4	208 V	3	HARDWIRED	PROVIDE NON-FUSED DISCONNECT SWITCH
CP-05A		660 VA	1/2	120 V	1	HARDWIRED	PROVIDE MANUAL MOTOR STARTER ON OR NEAR UNIT
CP-05B		660 VA	1/2	120 V	1	HARDWIRED	PROVIDE MANUAL MOTOR STARTER ON OR NEAR UNIT

EXISTING PANEL 2C LOAD ANALYSIS

- LOAD ANALYSIS FOR PANEL 2C: NEW ELECTRICAL WORK IN MECHANICAL ROOM WILL CONSIST OF RETIRING 9 CIRCULATION PUMPS, AND ADDING 3 NEW PUMPS. EIGHT PUMPS HAVE A LOAD 2500 VA EACH, PLUS ONE PUMP WITH A LOAD OF 600VA FOR A TOTAL LOAD OF 20,600 VA. 3 PUMPS WITH A TOTAL LOAD OF 18,060VA WILL BE ADDED. THERE IS A NET REDUCTION OF LOAD OF 2,540VA FOR PANEL 2C. EXISTING PANEL 2C AND FEEDERS TO REMAIN UNMODIFIED.
- EXISTING CIRCUIT BREAKERS IN SPACES 14,16,18 AND 20,22,24 WILL BE REMOVED AND REPLACED WITH 90A/3P CIRCUIT BREAKERS, WHICH SHALL BE COMPATIBLE WITH EXISTING PANEL 2C, AND SHALL MATCH OR EXCEED AIC RATINGS.
- EXISTING CIRCUIT BREAKER IN SPACE 9 TO REMAIN FOR REUSE.

ELECTRICAL SPECIFICATIONS

- GENERAL REGULATORY REQUIREMENTS
 - CONFORM TO REQUIREMENTS OF NFPA 70, NATIONAL ELECTRICAL CODE (NEC) LATEST ADOPTED EDITION.
 - CONFORM TO REQUIREMENTS OF NFPA 72, NATIONAL FIRE PROTECTION ASSOCIATION LATEST ADOPTED EDITION.
 - CONFORM TO REQUIREMENTS OF IBC, INTERNATIONAL BUILDING CODE LATEST ADOPTED EDITION.
 - CONFORM TO MOA REQUIREMENTS AND ALL LOCAL AMENDMENTS.
 - FURNISH PRODUCTS LISTED AND CLASSIFIED BY UNDERWRITERS LABORATORIES, INC AS SUITABLE FOR PURPOSE SPECIFIED AND SHOWN.
 - PERFORM WORK IN ACCORDANCE WITH NECA 1 - STANDARD PRACTICES FOR GOOD WORKMANSHIP IN ELECTRICAL CONTRACTING.
 - DELIVER, STORE, PROTECT, AND HANDLE PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. PROTECT PRODUCTS FROM WEATHER.
 - ACCEPT PRODUCTS ON SITE IN MANUFACTURER'S PACKAGING. INSPECT FOR DAMAGE. NOTIFY OWNER OF ALL DAMAGED PRODUCTS FOR DETERMINATION. DO NOT INSTALL DAMAGED PRODUCTS WITHOUT OWNERS WRITTEN PERMISSION.
 - DRAWINGS SHOW THE GENERAL LOCATIONS OF THE ELECTRICAL FEATURES ONLY, EXCEPT FOR FEATURES SPECIFICALLY DIMENSIONED. WHEN NECESSARY TO PRESENT A SYMMETRICAL APPEARANCE OR TO AVOID INTERFERENCE WITH OTHER INSTALLATIONS, MAKE MINOR RELOCATIONS AS REQUIRED FOR PROJECT CONDITIONS. DRAWINGS AND SPECIFICATIONS ARE COMPLEMENTARY TO EACH OTHER. WHAT IS SHOWN ON ONE IS BINDING AS IF CALLED FOR IN BOTH.
 - REVIEW AND COORDINATE THIS WORK WITH ALL ASSOCIATED MECHANICAL WORK AND ALL OTHER DRAWINGS AND SPECIFICATIONS. ADJUST THE WORK AS REQUIRED TO COORDINATE WITH OTHER WORK AND BE COMPATIBLE WITH CONDITIONS.
 - THE CONTRACTOR SHALL MAINTAIN ONE COPY OF AS-BUILT DRAWINGS ON SITE.
 - WORK SHALL BE PERFORMED IN ACCORDANCE WITH MOA, FEDERAL, AND OSHA SAFETY REQUIREMENTS.
 - OBTAIN AND PAY FOR ALL LICENSES, PERMITS, AND INSPECTIONS REQUIRED BY LAWS, ORDINANCES, AND RULES GOVERNING WORK SPECIFIED HEREIN. ARRANGE INSPECTION OF WORK BY THE INSPECTORS AND GIVE THE INSPECTORS ALL NECESSARY ASSISTANCE IN THE WORK OF INSPECTION.
- GROUNDING AND BONDING
 - INSTALL GROUNDING CONDUCTOR IN ALL NEW, MODIFIED AND RELOCATED RACEWAYS UNLESS OTHERWISE NOTED. SIZE GROUNDING CONDUCTOR IN ACCORDANCE WITH NEC REQUIREMENTS, UNLESS OTHERWISE NOTED.
- IDENTIFICATION
 - PROVIDE UPDATED PANEL SCHEDULE FOR ALL PANELBOARDS WITH CIRCUITS ADDED OR MODIFIED AS PART OF THIS WORK.
 - FIELD VERIFY ALL NEW AND EXISTING CIRCUITS WITHIN AREA OF WORK.
 - FOR NEW POWER AND CONTROL EQUIPMENT, LABEL ON EQUIPMENT SERVING PANELBOARD AND CIRCUIT ("PANEL" - "CIRCUIT(S)") AT BOTTOM OF COVERPLATE IN BLACK 1/4 INCH HIGH LETTERING.
 - LABELS: EMBOSSED ADHESIVE TAPE 1/4 INCH BLACK LETTERS ON WHITE BACKGROUND
- BUILDING WIRE AND CABLE
 - CIRCUIT CONDUCTORS
 - BRANCH CIRCUIT WIRING: CONDUCTORS: #12 AWG MINIMUM UNLESS OTHERWISE NOTED, TYPE XHHW INSULATION.
 - CONDUCTING MATERIAL FOR ALL WIRING SHALL BE COPPER
 - INSTALLATION
 - RUN ALL BRANCH CIRCUIT WIRES IN RACEWAYS.
 - INSTALL IN ACCORDANCE TO MANUFACTURERS WRITTEN INSTRUCTIONS
 - AVOID PINCHING AND MAKING SHARP BENDS IN CABLE
 - BENDING RADIUS: INSTALL IN ACCORDANCE WITH MANUFACTURERS INSTRUCTIONS
 - IDENTIFY EACH CONDUCTOR WITH ITS PANELBOARD AND CIRCUIT NUMBER AT TERMINATION'S, PANELBOARDS, DEVICES, AND SPLICES WITHIN JUNCTION BOXES WITH MACHINE PRINTED HEAT SHRINK TUBE TYPE WIRE MARKERS, KROY OR EQUAL.
 - FIELD QUALITY CONTROL
 - INSPECT WIRE FOR PHYSICAL DAMAGE AND PROPER CONNECTION.
 - VERIFY CONTINUITY OF EACH BRANCH CIRCUIT CONDUCTOR.
- CONDUIT AND BOXES
 - BOXES: USE HOT DIPPED GALVANIZED STEEL.
 - CONDUIT: USE GALVANIZED RIGID STEEL (GRC), FOR ALL GENERAL ROUTING. USE LIQUIDTIGHT FLEXIBLE METAL CONDUIT FOR CONNECTIONS TO MECHANICAL EQUIPMENT.
- WIRING DEVICES
 - VARIABLE FREQUENCY DRIVES FURNISHED BY MECHANICAL, INSTALLED BY ELECTRICAL.
 - PROVIDE HEAVY DUTY DISCONNECT, KNIFE SWITCH TYPE, HP RATED.
 - PROVIDE COMBINATION MOTOR STARTER-DISCONNECT, FACTORY ASSEMBLED COMBINATION OF MAGNETIC CONTROLLER, OCPD AND DISCONNECTING MEANS, WITH RED PILOT LIGHT TO INDICATE CONTROLLER IS ON.
 - PROVIDE GENERAL PURPOSE, FRACTIONAL HORSEPOWER MANUAL STARTER WITH FULL VOLTAGE CONTROLLER. UNIT SHALL INCLUDE THERMAL OVERLOAD PROTECTION, RED PILOT LIGHT AND TOGGLE OPERATOR.
 - DEVICES AND DEVICE PLATES: STAINLESS STEEL
 - INSTALLATION
 - INSTALL PRODUCTS IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.
 - INSTALL DEVICES PLUMB AND LEVEL.
- MOLDED CASE CIRCUIT BREAKERS
 - CIRCUIT BREAKER: SQUARE D TYPE QOB, BOLT-ON TYPE THERMAL MAGNETIC TRIP CIRCUIT BREAKER WITH COMMON TRIP HANDLE FOR ALL POLES. CIRCUIT BREAKERS SHALL BE UL LISTED, AND SHALL MATCH OR EXCEED AIC RATING OF EXISTING PANEL. PROVIDE CIRCUIT BREAKER AMP RATING AS SHOWN IN DRAWINGS.
- TELECOMMUNICATIONS
 - PROVIDE 3/4" CONDUIT AT A MINIMUM, AND EXTEND DATA POINT FROM NEAREST EXISTING DDC PANEL, CONTRACTOR TO VERIFY. PROVIDE CAT5E COMMUNICATIONS CABLE.
 - PROVIDE TELECOMMUNICATIONS OUTLET WITH NUMBER OF JACKS AS NOTED ON DRAWINGS
 - INSTALL CABLE IN CONDUIT, CABLE TRAY OR SUPPORT RINGS ABOVE CEILING.
- SUBMITTALS PROCEDURES
 - SHOP DRAWINGS AND PRODUCT DATA: SUBMIT TO OWNER FOR REVIEW FOR LIMITED PURPOSE OF CHECKING FOR CONFORMANCE WITH INFORMATION GIVEN AND DESIGN CONCEPT EXPRESSED IN CONTRACT DOCUMENTS.
 - SUBMIT PRODUCT INFORMATION FOR WIRING DEVICES, CIRCUIT BREAKERS AND DISCONNECT SWITCH.
 - MANUFACTURERS INSTRUCTIONS: SUBMIT PRINTED INSTRUCTIONS FOR INSTALLATION, ADJUSTING, FINISHING TO OWNER WITH RECORD DOCUMENTS.

GENERAL ELECTRICAL NOTES

- COMPLY WITH NFPA 70, NATIONAL ELECTRICAL CODE 2014 EDITION; NECA 1, STANDARD FOR GOOD WORKMANSHIP IN ELECTRICAL CONSTRUCTION; AND NATIONAL ELECTRICAL SAFETY CODE.
- ELECTRICAL COMPONENTS, DEVICES, ASSEMBLIES, AND ACCESSORIES ARE REQUIRED TO BE LISTED AND LABELED AS DEFINED IN NFPA 70, ARTICLE 100, BY A TESTING AGENCY ACCEPTABLE TO AUTHORITIES HAVING JURISDICTION, AND MARKED FOR INTENDED USE.
- DRAWINGS SHOW THE GENERAL LOCATIONS OF THE ELECTRICAL FEATURES ONLY, UNLESS OTHERWISE INDICATED. MAKE MINOR RELOCATIONS AS REQUIRED FOR PROJECT CONDITIONS WHEN NECESSARY TO PRESENT SYMMETRICAL APPEARANCE OR TO AVOID INTERFERENCE WITH OTHER INSTALLATIONS.
- NEUTRAL CONDUCTORS SHALL NOT BE SHARED BETWEEN BRANCH CIRCUITS, UNLESS OTHERWISE INDICATED.
- PROVIDE INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH ALL FEEDERS AND BRANCH CIRCUITS. TERMINATE EACH END ON SUITABLE LUG, BUS OR BUSHING. SIZE EQUIPMENT GROUNDING CONDUCTORS IN ACCORDANCE WITH NEC, UNLESS OTHERWISE INDICATED, BUT NOT SMALLER THAN NO. 12 AWG.

ELECTRICAL ABBREVIATIONS

(D)	DEMOLISH
(E)	EXISTING
A	AMPERES
AIC	AMPS INTERRUPTING CAPACITY
C	CONDUIT
CKT	CIRCUIT
EMT	ELECTRICAL METALLIC TUBING
FMC	FLEXIBLE METAL CONDUIT
GND	GROUND OR GROUNDED
GRC	GALVANIZED RIGID STEEL CONDUIT (HOT-DIPPED)
KVA	KILOVOLT AMPERES
LFMC	LIQUIDTIGHT FLEXIBLE METAL CONDUIT
MCB	MAIN CIRCUIT BREAKER
MOA	MUNICIPALITY OF ANCHORAGE
N	NEUTRAL, NORTH
NEC	NATIONAL ELECTRICAL CODE; NFPA 70
PNL	PANEL(BOARD)
UL	UNDERWRITERS' LABORATORIES
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VA	VOLT AMPERES
VFC	VARIABLE FREQUENCY CONTROLLER

LINE TYPES

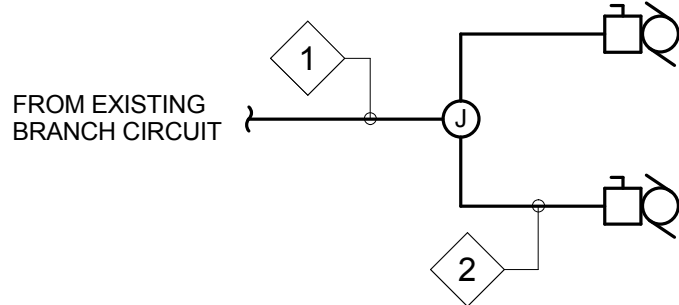
-----	DEMO WORK
_____	EXISTING WORK
=====	NEW WORK

SHEET NOTES

- SEE SHEET E-201 FOR DETAILS
- CONNECTION DIAGRAM APPLIES TO PUMPS AS INDICATED IN SHEETS E-101 AND E-201

SHEET KEYNOTES

- DISCONNECT EXISTING BRANCH CIRCUIT WIRING AND SAVE FOR RE-USE. FIELD VERIFY BRANCH CIRCUIT CONNECTIONS AND ORIGIN.
- PROVIDE CONDUCTOR TAP IN J-BOX TO FEED NEW PUMP AS SHOWN. TAP NOT TO EXCEED 10'.

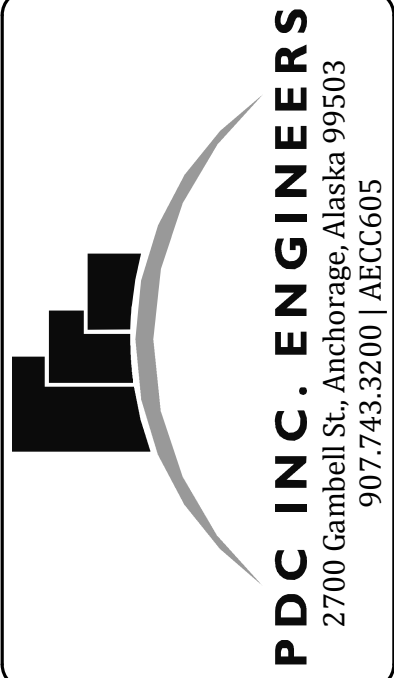


1
E001 DUAL PUMP CONNECTION DETAIL
NOT TO SCALE

No.	Date	Item
REVISIONS		

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CONSULTANT :



PROJECT :
**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**
**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :
**LEGEND AND
SPECIFICATIONS**
**100% CONSTRUCTION
DOCUMENTS**

DESIGN	EWB
DRAWN	JDS
CHECKED	EWB
DATE	02/09/2017

PROJECT No.
ANC 17-27C
SHEET NUMBER

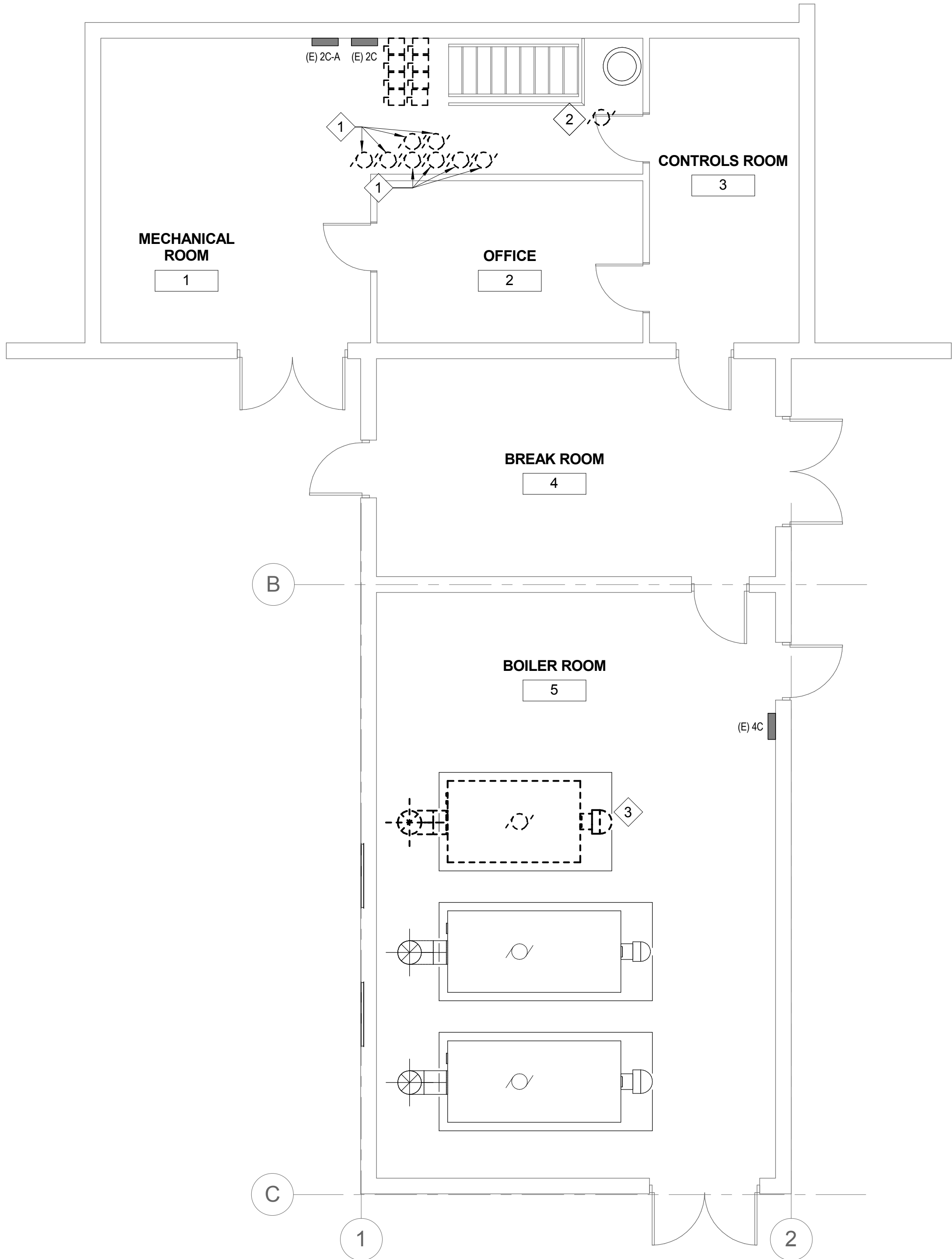
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SHEET NOTES

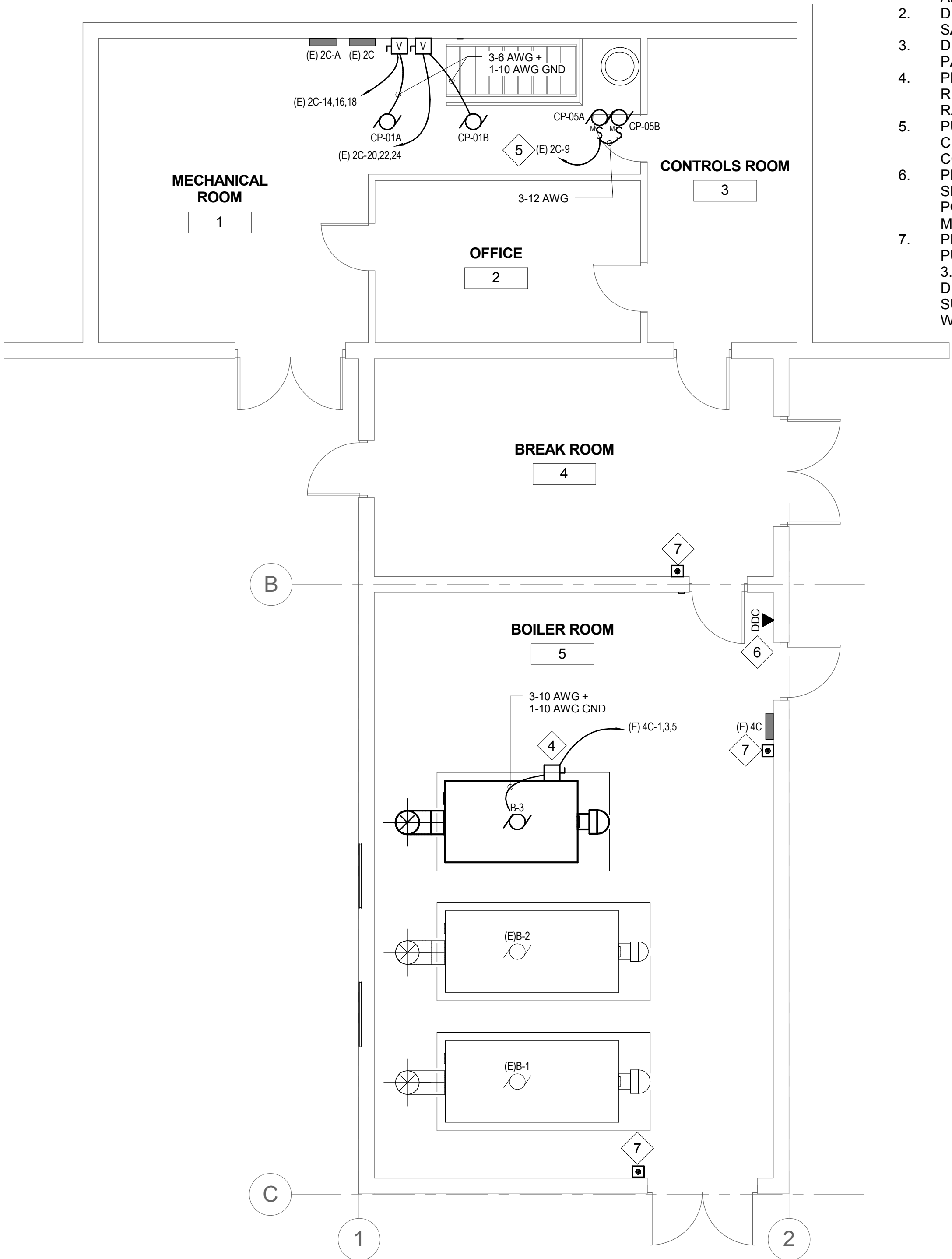
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SHEET KEYNOTES

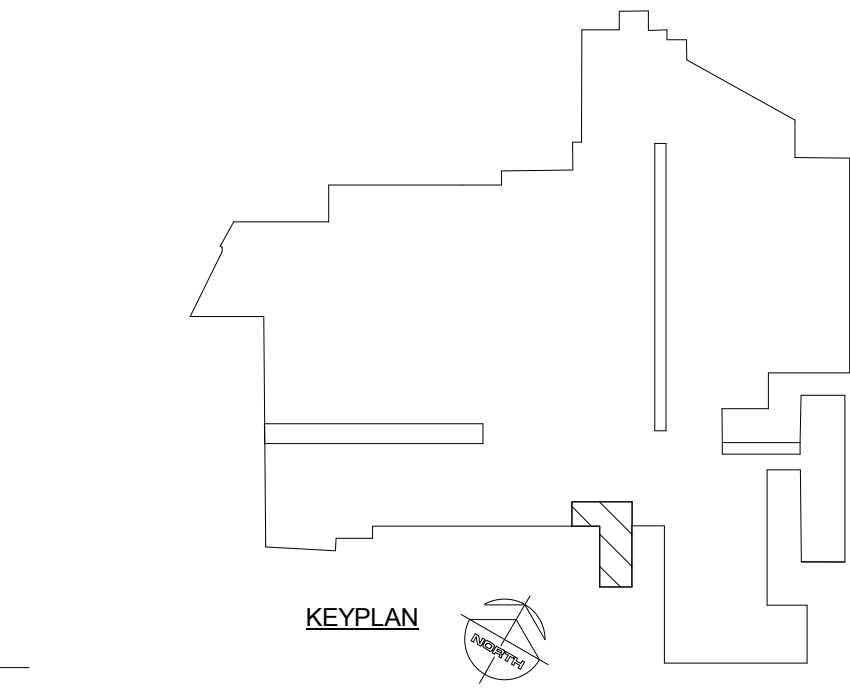
- 1. DEMOLISH ALL ELECTRICAL CONNECTIONS FROM PUMPS BACK TO PANELBOARD 2C-A AND 2C, TYP 9. DEMOLITION TO INCLUDE ALL WIRING, RACEWAY, SWITCHES AND ACCESSORIES. DEMOLISH CIRCUIT BREAKERS CORRESPONDING TO SPACES 14,16,18,20,22,24 IN PANEL 2C TO MAKE SPACE FOR NEW CIRCUIT BREAKERS, ALL OTHER BREAKERS NOT IN USE SHALL BE TURNED TO OFF POSITION AND LABELED SPARE.
- 2. DEMOLISH PUMP, DISCONNECT (E) BRANCH CIRCUIT AND SAVE FOR RE-USE.
- 3. DEMOLISH ALL BOILER ELECTRICAL CONNECTIONS BACK TO PANEL 4C.
- 4. PROVIDE NEW HP RATED DISCONNECT SWITCH. BOILER REPLACEMENT IS OF SIMILAR SIZE AND HORSEPOWER RATING AS RETIRED BOILER.
- 5. PUMPS ARE NON-COINCIDENT, CONNECT TO (E) 20A/1P CIRCUIT BREAKER. SEE 1/E-001 FOR PUMP ELECTRICAL CONNECTION SCHEME.
- 6. PROVIDE 20A/1P CIRCUIT BREAKER IN AVAILABLE BREAKER SPACE FROM (E) PANEL 4C. PROVIDE DATA OUTLET WITH ONE PORT TO DDC CONTROL PANEL. COORDINATE LOCATION WITH MECHANICAL.
- 7. PROVIDE MUSHROOM STYLE BOILER EMERGENCY SHUTDOWN PUSHBUTTON, LOCATE INSIDE CLEAR LEXAN COVER, TYP OF 3. LABEL "EMERGENCY BOILER SHUTDOWN". DEVICE SHALL DISCONNECT POWER TO BURNERS AND DISCONNECT GAS SUPPLY VIA MOTORIZED GAS SAFETY VALVE TO ALL BOILERS WHEN ACTUATED. SEE 6/M301 FOR DETAILS.



1 POWER & SIGNAL PLAN - DEMO
3/16" = 1'-0"

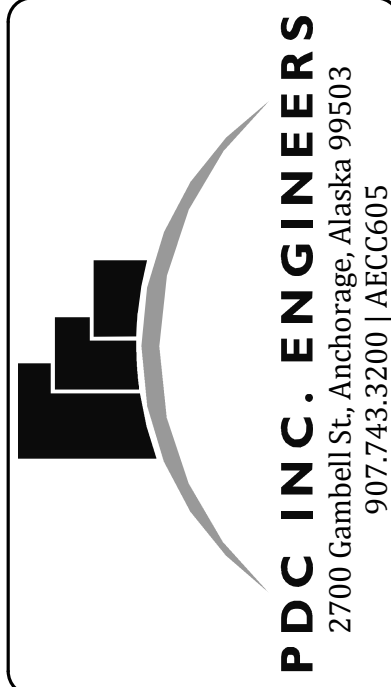
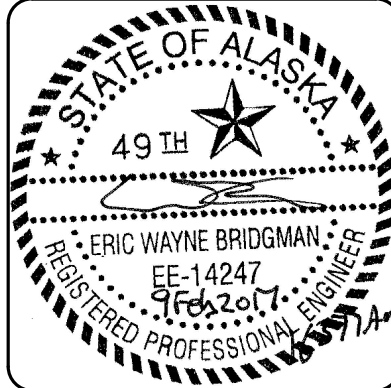


2 POWER & SIGNAL PLAN
3/16" = 1'-0"



No.	Date	Item
REVISIONS		

CONSULTANT :



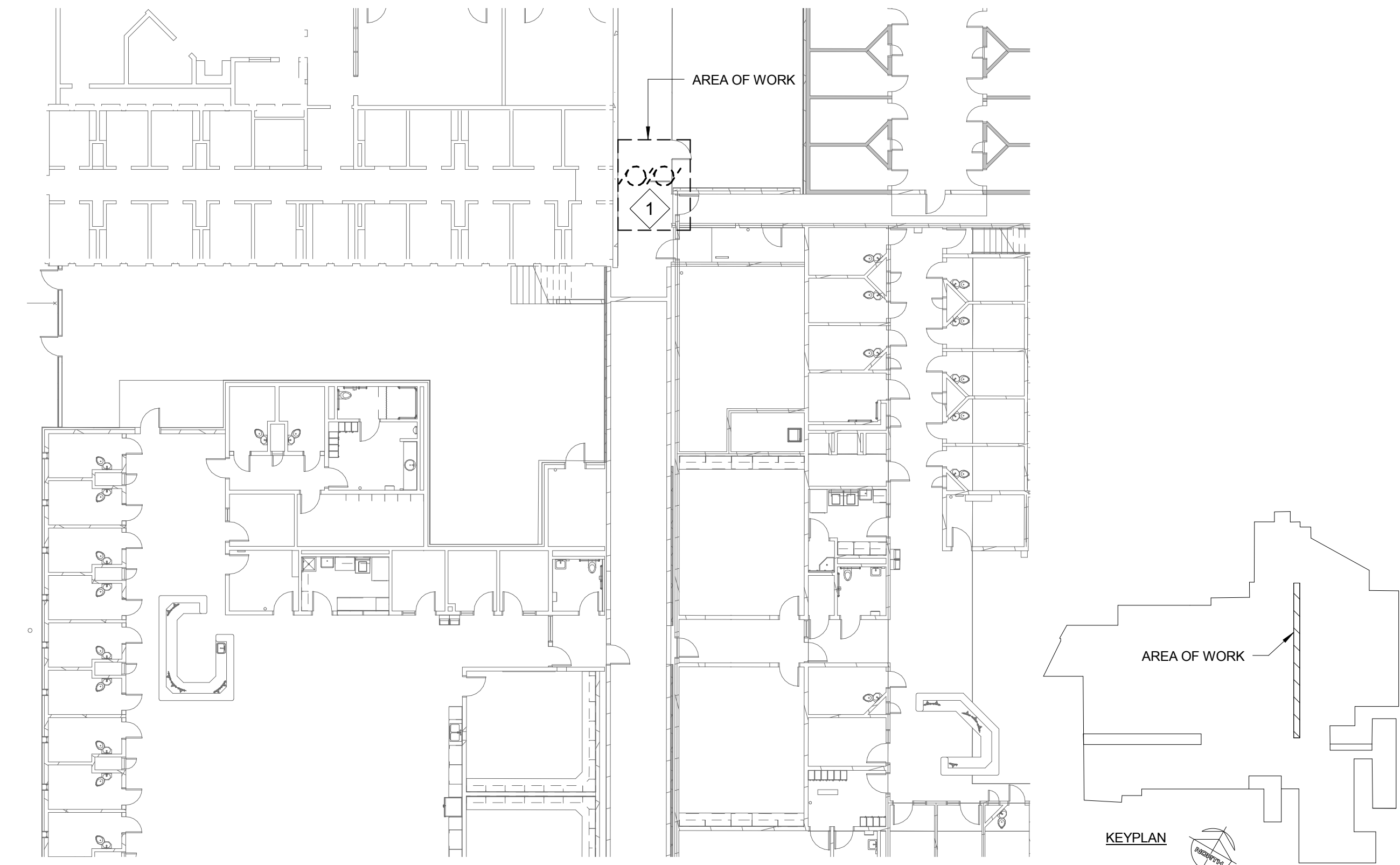
PROJECT :
**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**
**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :
ELECTRICAL PLAN
**100% CONSTRUCTION
DOCUMENTS**

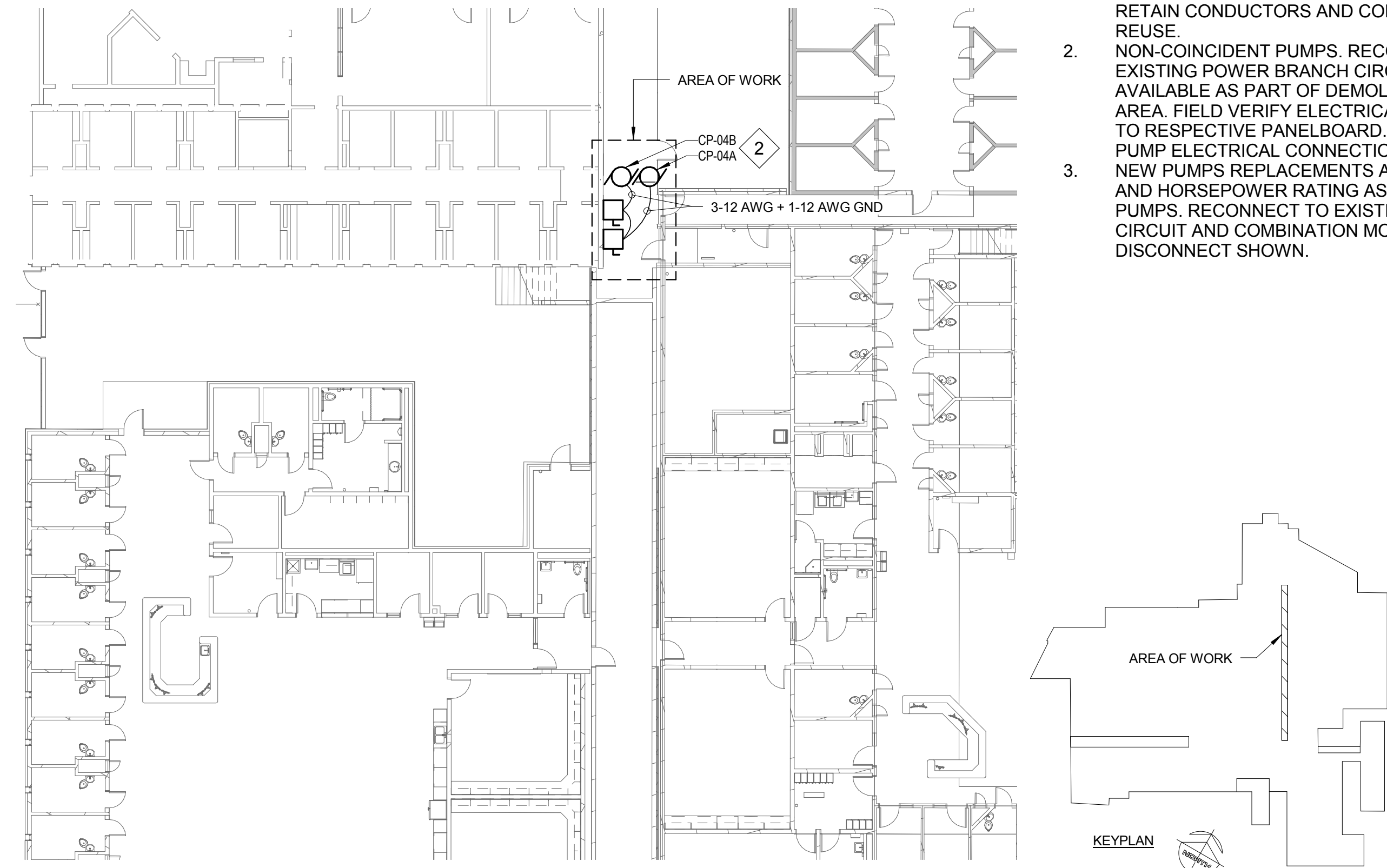
DESIGN	EWB
DRAWN	JDS
CHECKED	EWB
DATE	02/09/2017

PROJECT No.
ANC 17-27C

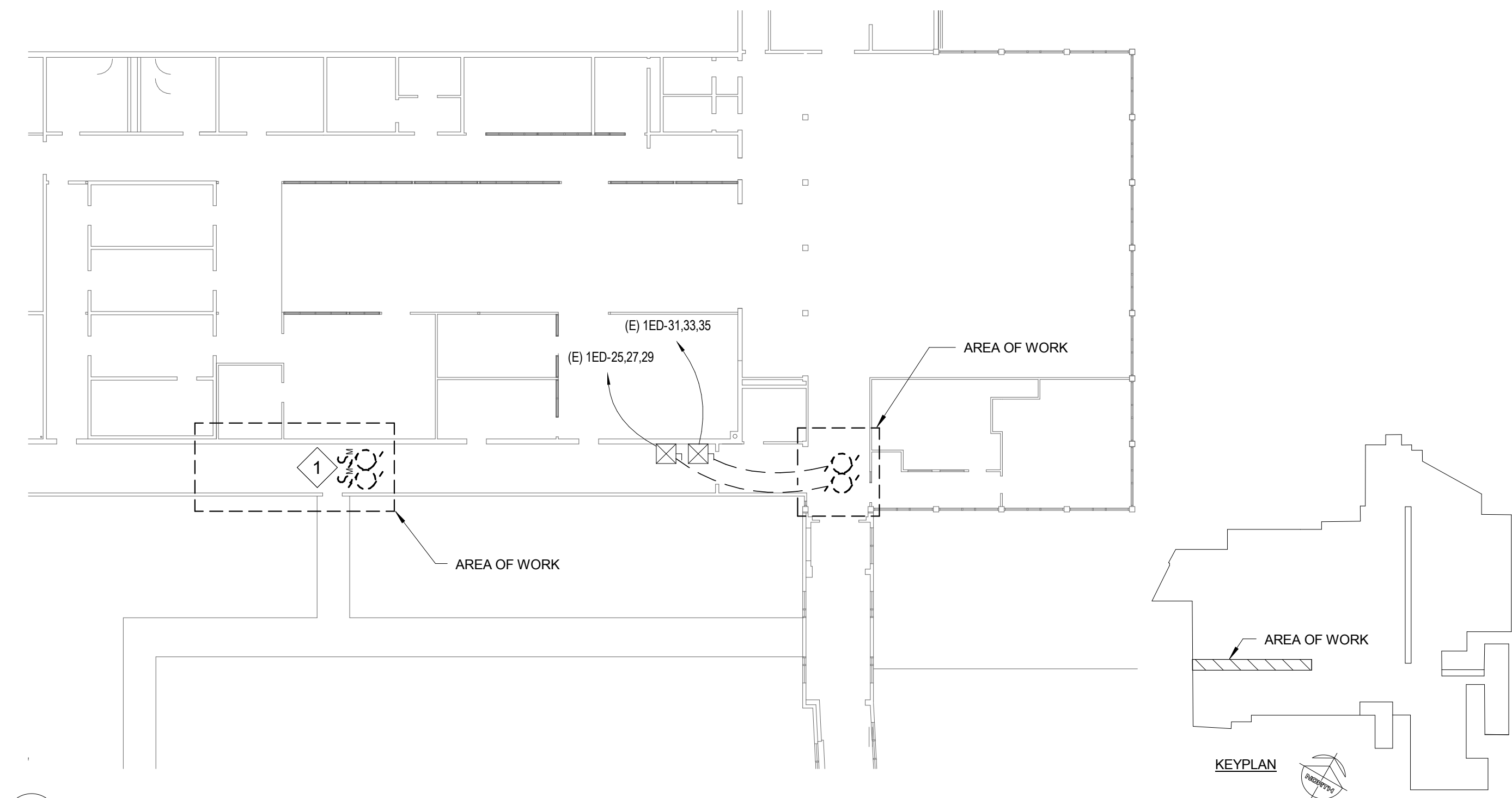
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E101



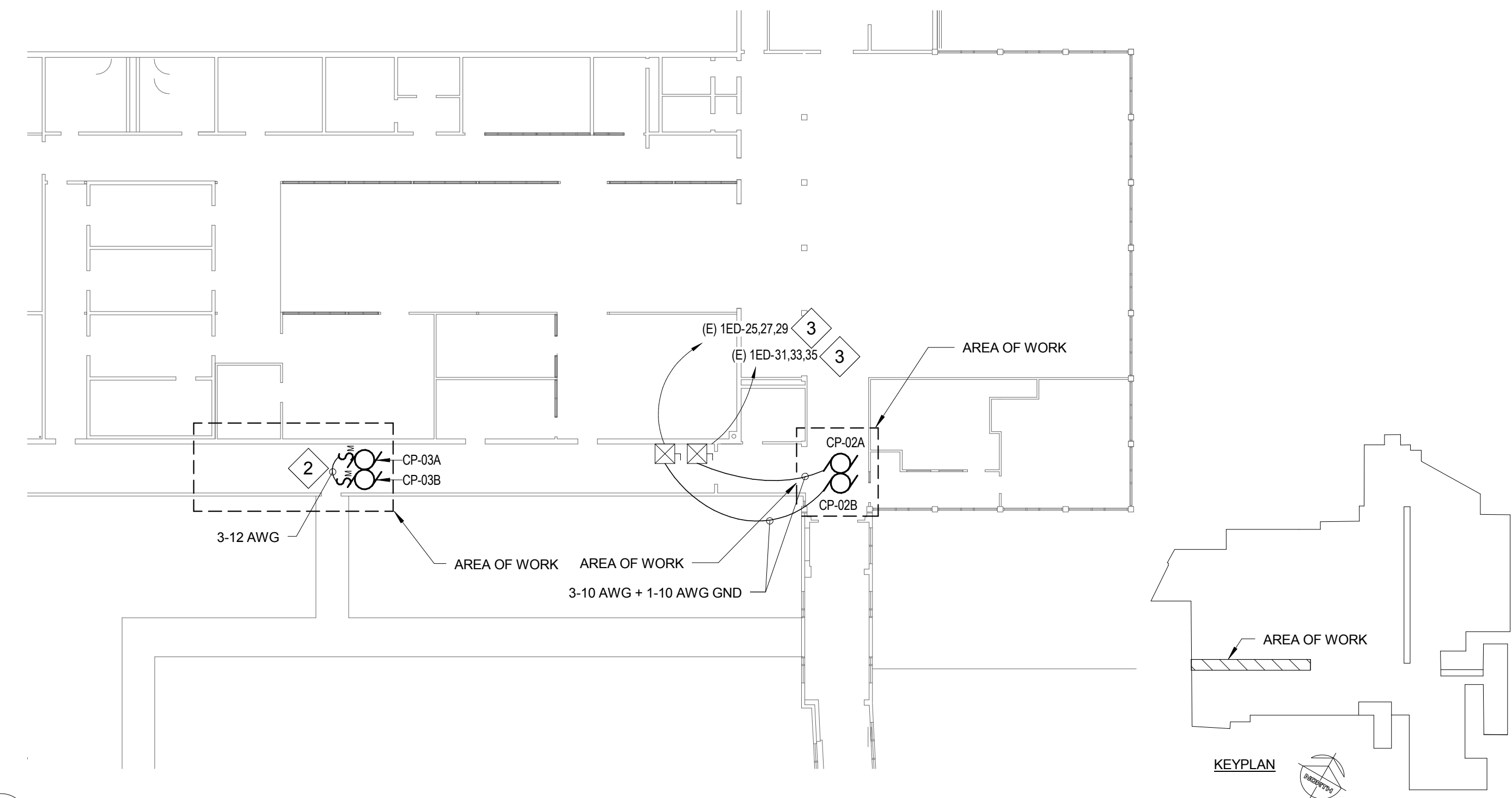
1 GYM BOOSTER PUMP - DEMO
E201 1/16" = 1'-0"



2 GYM BOOSTER PUMP
E201 1/16" = 1'-0"



3 KITCHEN BOOSTER PUMPS - DEMO
E201 1/16" = 1'-0"



4 KITCHEN BOOSTER PUMPS
E201 1/16" = 1'-0"

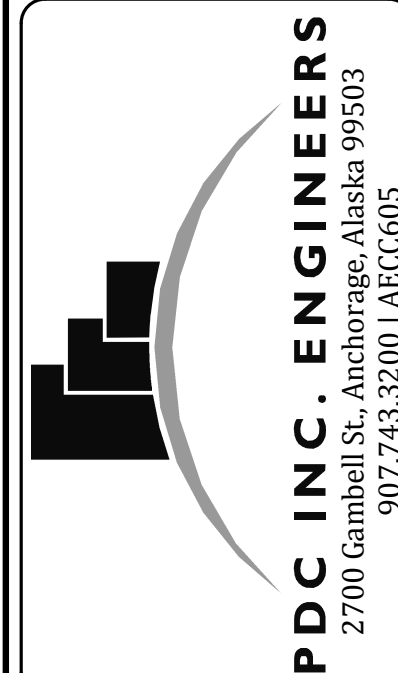
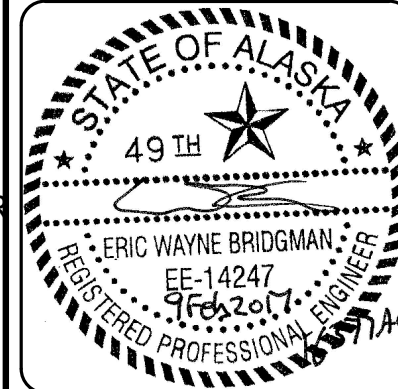
SHEET NOTES

- CONTRACTOR TO FIELD VERIFY EXISTING SITE CONDITIONS PRIOR TO BEGINNING OF WORK.

SHEET KEYNOTES

- DEMOLISH PUMPS AND POWER CONNECTIONS. RETAIN CONDUCTORS AND CONDUIT FOR REUSE.
- NON-COINCIDENT PUMPS. RECONNECT TO EXISTING POWER BRANCH CIRCUIT MADE AVAILABLE AS PART OF DEMOLITION IN THIS AREA. FIELD VERIFY ELECTRICAL CONNECTION TO RESPECTIVE PANELBOARD. SEE 1/E-001 FOR PUMP ELECTRICAL CONNECTION SCHEME.
- NEW PUMPS REPLACEMENTS ARE SAME SIZE AND HORSEPOWER RATING AS DEMOLISHED PUMPS. RECONNECT TO EXISTING BRANCH CIRCUIT AND COMBINATION MOTOR STARTER DISCONNECT SHOWN.

CONSULTANT :



PROJECT :
**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**
**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :
**ELECTRICAL - BOOSTER
PUMPS**
**100% CONSTRUCTION
DOCUMENTS**

DESIGN EDA
DRAWN JDS
CHECKED EWB
DATE 02/09/2017

PROJECT No.
ANC 17-27C

SHEET NUMBER

E201

No.	Date	Item
REVISIONS		

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GENERAL NOTES

1. THE HAZARDS ABATEMENT PORTION OF THIS PROJECT INCLUDES THE DISTURBANCE AND/OR REMOVAL AND DISPOSAL OF SELECTED ASBESTOS-CONTAINING MATERIALS, LEAD-CONTAINING MATERIALS, AND CHEMICAL HAZARDS. THE PURPOSE OF THE HAZARDS ABATEMENT PORTION OF THE WORK IS TO REMOVE THESE MATERIALS FROM THE MCLAUGHLIN YOUTH CENTER PRIOR TO RENOVATION OR DEMOLITION SO THAT PERSONNEL CAN SAFELY PERFORM THEIR WORK WITHOUT CREATING HAZARDS TO HEALTH OR THE ENVIRONMENT.
2. THE WORK DOES NOT INCLUDE REMOVAL OF ALL HAZARDOUS MATERIALS IN THE BUILDING. REMOVE HAZARDOUS MATERIALS COORDINATING WITH OTHER TRADES, AS SPECIFIED AND/OR INDICATED ON THE DRAWINGS AND AS REQUIRED TO COMPLETE THE WORK. "REMOVAL" INCLUDES PROPER HANDLING, PACKAGING AND DISPOSAL OF MATERIALS REMOVED.
3. POTENTIALLY HAZARDOUS MATERIALS SUCH AS HEATING SYSTEM GLYCOL AFFECTED BY THE PROJECT IS TO BE REMOVED AND DISPOSED OF PROPERLY. REFER TO SPECIFICATIONS AND THE CONTRACTOR'S APPROVED WORK PLAN FOR HAZARDOUS MATERIALS REMOVAL, DISTURBANCE AND DISPOSAL PROCEDURES.
4. LEAD-BASED PAINTS (PAINT CONTAINING EQUAL TO OR GREATER THAN 1.0 mg/cm²) WERE IDENTIFIED DURING THE LIMITED LEAD TESTING SHOWN IN THE HAZMAT SURVEY, AND LEAD-BASED PAINTS MAY BE PRESENT AT OTHER LOCATIONS. LOW LEVELS OF LEAD FOUND BY XRF TESTING DOES NOT MEAN THE PAINTS ARE FREE OF LEAD, THE PAINTS MAY CONTAIN MEASURABLE AMOUNTS OF LEAD. LEAD-CONTAINING MATERIALS INCLUDE ALL PAINTED SURFACES, CERAMIC TILES, AND METALLIC LEAD, AS WELL AS LEAD-CONTAINING DUSTS. THIS IS NOT A LEAD ABATEMENT PROJECT, AND ALL TRADES WILL LIKELY DISTURB SOME LEAD-CONTAINING MATERIALS. CONTROL WORKER EXPOSURES USING LEAD-SAFE WORK PRACTICES AND CHOICE OF MEANS AND METHODS OF CONDUCTING THE WORK TO COMPLY WITH 29 CFR 1926.62 AND TO AVOID CONTAMINATION OF THE WORK AREA AND SITE.
5. PERFORM INITIAL AIR MONITORING TESTS ON ALL TASKS THAT DISTURB ASBESTOS OR LEAD-CONTAINING MATERIALS, DUST OR PAINT TO DETERMINE THE APPROPRIATE WORKER AND SITE PROTECTION PROCEDURES REQUIRED. METALLIC LEAD IS ASSUMED PRESENT IN BELL AND SPIGOT PIPE JOINTS AND IN SOLDER ON COPPER PIPES.
6. SETTLED AND CONCEALED DUST ON ARCHITECTURAL, STRUCTURAL, ELECTRICAL AND MECHANICAL COMPONENTS THROUGHOUT THE PROJECT AREA IS ASSUMED TO CONTAIN REGULATED AIR CONTAMINANTS INCLUDING ASBESTOS AND LEAD. WORK OF ALL TRADES MAY INCLUDE DISTURBANCE OF ASBESTOS AND LEAD AND MAY RESULT IN WORKER EXPOSURE TO ASBESTOS AND LEAD ABOVE THE OSHA ACTION LEVEL OR PERMISSIBLE EXPOSURE LIMITS FOR ASBESTOS OR LEAD IF PROPER WORK PRACTICES AND/OR ENGINEERING CONTROLS ARE NOT USED. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CHOOSE APPROPRIATE WORKER AND SITE PROTECTION PROCEDURES SO THAT THEIR WORKERS ARE NOT EXPOSED ABOVE THOSE LIMITS AND THAT WORK IS PERFORMED IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. THE PRESENCE OF ASBESTOS OR LEAD IN DUSTS DOES NOT NECESSARILY MAKE THEM A HAZARD TO WORKERS OR A HAZARDOUS WASTE.
7. THE CONTRACTOR'S INDEPENDENT LABORATORY SHALL PROVIDE ALL INSPECTIONS, MONITORING, SAMPLING, ANALYSES AND REPORTING SERVICES AS SPECIFIED. CLEARANCE AIR MONITORING SHALL BE CONDUCTED N ACCORDANCE WITH 40 CFR 763. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION ON SAMPLING.
8. LOCATIONS OF MATERIALS SHOWN ON THESE DRAWINGS ARE SCHEMATIC AND APPROXIMATE. FIELD VERIFY AND COORDINATE CONSTRUCTION DETAILS, DIMENSIONS, WORK CONDITIONS, AND LOCATIONS WHICH WILL AFFECT THE REMOVAL OR DISTURBANCE OF HAZARDOUS MATERIALS. HAZARDOUS MATERIALS MAY HAVE COME LOOSE AND FALLEN ONTO FLOORS, CEILINGS, CHASES, OR WALL CAVITIES. THE QUANTITIES SHOWN IN THE SHEET SUMMARY ARE APPROXIMATE AND MAY VARY DEPENDING ON THE CONTRACTOR'S MEANS AND METHODS. REQUIRE ALL TRADES TO COORDINATE WITH EACH OTHER AND TO CONDUCT THEIR WORK TO PREVENT WORKER EXPOSURE OR SITE CONTAMINATION, SEE DRAWINGS OF ALL DISCIPLINES FOR ADDITIONAL INFORMATION RELATING TO HAZARDOUS MATERIALS. IMMEDIATELY COMMUNICATE ALL DISCREPANCIES IN QUANTITIES TO THE OWNER. REFER TO HAZARDOUS MATERIALS ASSESSMENT FOR MORE INFORMATION ABOUT POTENTIALLY HAZARDOUS MATERIALS THAT ARE NOT SCHEDULED FOR DISTURBANCE BY THIS PROJECT. FURNISH ALL WORK AND MATERIALS REQUIRED FOR A FINISHED PROJECT AS DESCRIBED IN THE CONTRACT DOCUMENTS. QUANTITIES LISTED WITH A * MAY VARY DEPENDING ON THE CONTRACTOR'S MEANS AND METHODS.
9. PROVIDE ALL WASTE TESTING, PACKAGING, HANDLING, TRANSPORTATION AND DISPOSAL. ALL COSTS FOR DISPOSAL SHALL BE BORNE BY THE CONTRACTOR. PERFORM TOXICITY CHARACTERISTIC LEACHING PROCEDURE (TCLP) TEST(S) OF WASTE(S) CONTAINING LEAD OR PAINTED WITH LEAD-CONTAINING PAINT TO CHARACTERIZE THE WASTE(S) AS HAZARDOUS OR NON-HAZARDOUS PRIOR TO DISPOSAL. COORDINATE REQUIREMENTS OF LANDFILL(S) REGARDING MATERIALS PACKAGING, HANDLING, AND DISPOSAL REQUIREMENTS PRIOR TO SUBMITTING BID.

ESTIMATED QUANTITIES TO BE REMOVED (ENTIRE PROJECT)

INCIDENTAL QUANTITIES OF MATERIALS, INCLUDING LEAD-CONTAINING MATERIALS, THAT ARE REQUIRED TO BE REMOVED TO COMPLETE THE WORK, BUT OTHERWISE ARE TO REMAIN, ARE NOT INCLUDED HERE, AS THEY WILL VARY DEPENDING ON THE CONTRACTOR'S CHOICE OF MEANS AND METHODS.

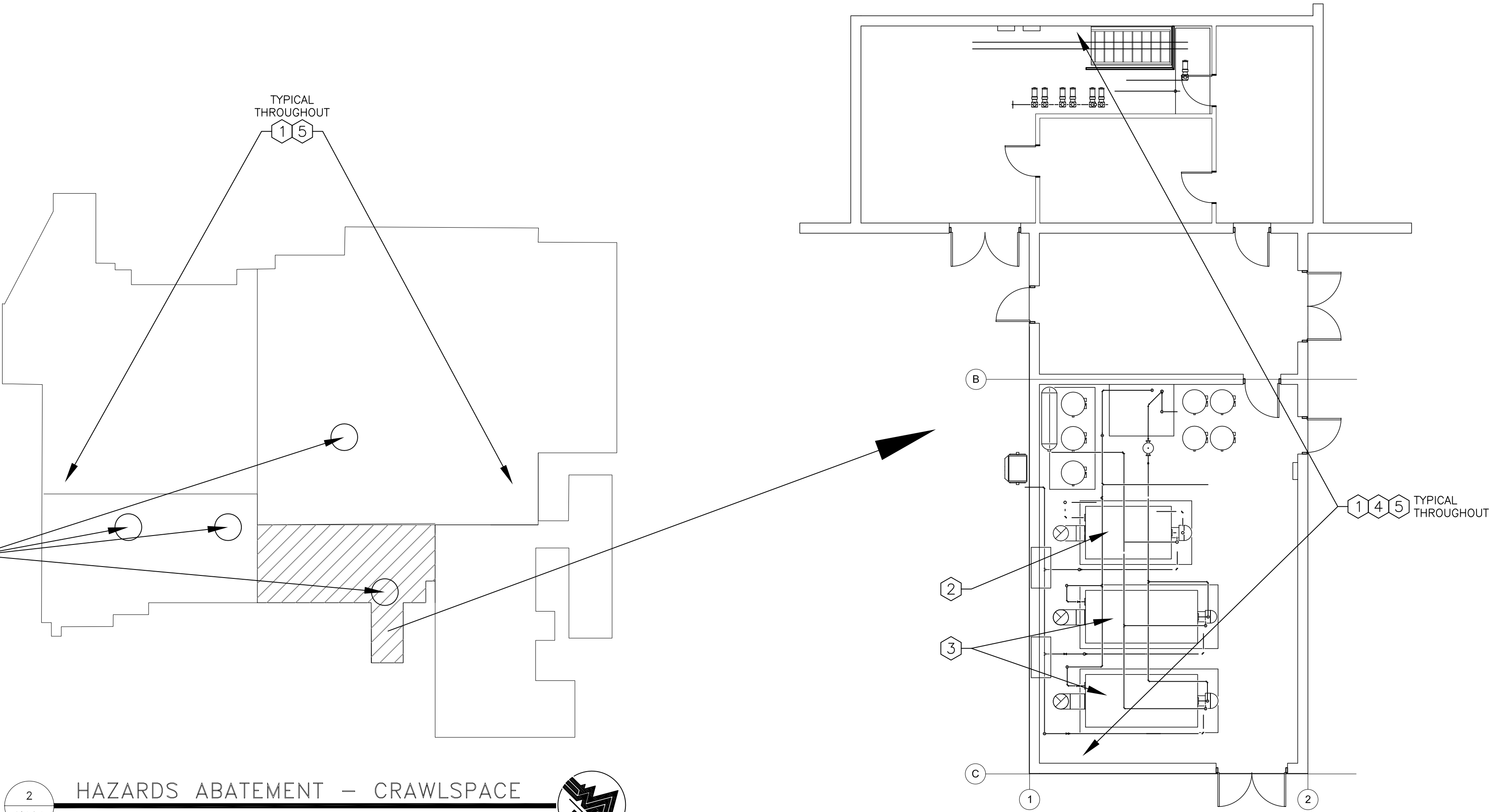
- 1 LOT OF ASBESTOS-CONTAINING GASKETS AND VALVE PACKINGS ON PIPING SYSTEMS.
- 1 EACH BOILER TO BE DEMOLISHED AND DISPOSED OF WITH ASSUMED ASBESTOS-CONTAINING INACCESSIBLE INTERNAL COMPONENTS SUCH AS GASKETS, SEALANTS, REFRACTORIES, ETC.
- 2 EACH BOILERS TO BE REFURBISHED WITH ASSUMED ASBESTOS-CONTAINING INACCESSIBLE INTERNAL BOILER COMPONENTS SUCH AS GASKETS, SEALANTS, REFRACTORIES, ETC.
- 25 SQUARE FOOT ALLOWANCE OF ROOFING WITH REMNANTS OF ASBESTOS-CONTAINING ROOFING MATERIALS UNDER NEWER ROOFING, PATCH TARS, AND MASTICS.
- 1 LOT OF HEATING SYSTEM GLYCOL. GLYCOL BEING DISPOSED OF REQUIRES TCLP TESTING TO DETERMINE DISPOSAL REQUIREMENTS.

APPROXIMATE LOCATIONS OF WORK REQUIRED IN CRAWLSPACE. REFER TO DRAWINGS BY OTHERS FOR EXACT LOCATIONS AND COMPONENTS

SHEET NOTES

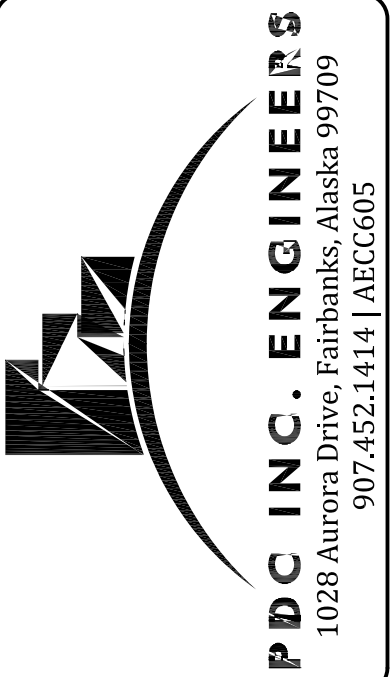
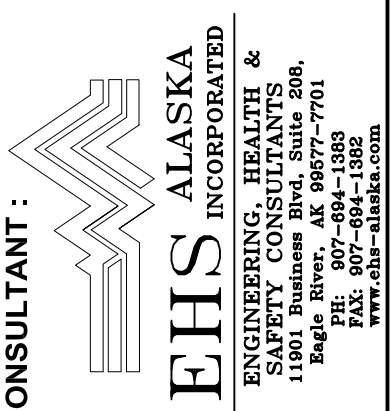
HAZARDS ABATEMENT DRAWINGS DO NOT SHOW ALL DETAILS OF WORK REQUIRED. ALL TRADES SHALL EXAMINE DRAWINGS OF OTHER TRADES AND COORDINATE WITH EACH OTHER TO DETERMINE EXTENT, TIMING AND LOCATIONS OF MATERIALS AFFECTED BY THE PROJECT.

- 1 REMOVE AND DISPOSE OF ASBESTOS-CONTAINING GASKETS AND VALVE PACKINGS ON PIPING SYSTEMS AS REQUIRED TO COMPLETE THE WORK.
- 2 REMOVE AND DISPOSE OF BOILER WITH ASSUMED ASBESTOS-CONTAINING INACCESSIBLE INTERNAL COMPONENTS SUCH AS GASKETS, SEALANTS, REFRACTORIES, ETC.
- 3 REMOVE AND DISPOSE OF ASSUMED ASBESTOS-CONTAINING INACCESSIBLE INTERNAL BOILER COMPONENTS SUCH AS GASKETS, SEALANTS, REFRACTORIES, ETC. ON BOILERS TO BE REFURBISHED.
- 4 REMOVE AND DISPOSE OF ROOFING WITH REMNANTS OF ASBESTOS-CONTAINING ROOFING MATERIALS INCLUDING ASBESTOS-CONTAINING PATCH TARS, AND MASTICS UNDER NEWER ROOFING, AS NECESSARY TO COMPLETE THE WORK.
- 5 REMOVE AND DISPOSE OF HEATING SYSTEM GLYCOL AS NECESSARY TO COMPLETE THE WORK. GLYCOL BEING DISPOSED OF REQUIRES TCLP TESTING TO DETERMINE DISPOSAL REQUIREMENTS.



NOTIFICATION OF POTENTIAL HAZARDS

ASBESTOS, LEAD, AND OTHER HAZARDOUS MATERIALS ARE PRESENT IN THE BUILDING AND MAY IMPACT THE WORK OF ALL TRADES. REGULATED AIR CONTAMINATES, 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.



PROJECT : MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT
2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508

SHEET TITLE : HAZARDS ABATEMENT -
BOILER ROOM &
CRAWLSPACE
100% CONSTRUCTION
DOCUMENTS

DESIGN CTO
DRAWN CTO
CHECKED RAF
DATE 02/22/2017

PROJECT No.
7499

SHEET NUMBER

H101

No.	Date	Item
REVISIONS		

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. All work shall comply with the conditions outlined in the overall Contract. The following information provides specific requirements for the hazardous materials.
- B. A limited hazardous materials survey was performed as part of the design services for this project, however, not all materials were able to be accessed for sampling such as inside of operational equipment including the boilers and boiler flues. Refer to Hazardous Materials Assessment included as part of this contract. The hazards abatement portion of this project includes the disturbance and/or removal and disposal of selected asbestos-containing materials, lead-containing materials and/or other hazardous materials in the portions of the building being renovated. The Contractor shall remove or disturb hazardous materials as coordinated with other trades, as specified and/or indicated on the drawings and as required to complete the work. Refer to the Contractor's approved work plan for hazardous materials removal, disturbance and disposal procedures.

1.2 ASBESTOS-CONTAINING MATERIALS

- A. The following asbestos-containing materials are known or assumed to be present, and are likely to be disturbed by this project. If any bulk sampling is conducted to disprove any assumed ACM, that sampling shall be conducted by EPA certified Building Inspectors in full compliance with 40 CFR 763, and the results submitted to the Owner. At least 24 hour notice to the Owner and/or shall be submitted prior to any bulk sampling.
- Gaskets and valve packing at boilers and other piping components (confirmed and assumed asbestos).
 - Boilers with assumed asbestos-containing inaccessible internal components such as gaskets, sealants, refractory's, etc.
 - Roofing with remnants of assumed asbestos-containing roofing materials including patch tars, and mastics under newer roofing, .
- B. The following asbestos-containing materials are known or assumed to be present, BUT are NOT likely to be disturbed by this project.
- Gray and black roofing sealants at parapet coping caps, and sidewall reglet flashing of Gymnasium Building, and corridor roof to Gymnasium Building.
 - Gray and Black roofing sealants at metal roofing and siding of Gymnasium Building, assumed to contain asbestos.
 - Black roofing sealants around penetrations and skylights of D2 and found on other areas of the complex in previous surveys.
 - Roll Roofing of Gymnasium Building, and corridor roof to Gymnasium Building.
 - Remnant roofing mastics and patching tars on the Boiler Plant Building, assumed to contain asbestos.
 - Black undercoatings on stainless steel drinking fountains of Gymnasium Building (confirmed ACM). Did not contain asbestos in ITU building.
 - Ventilation system duct sealants (found in gray/green sealants of Gymnasium Building). Did not contain asbestos in ITU building.
 - Tarry sound lining in speaker boxes of ITU Building, crawl space, and main floor of Detention Unit 2 (confirmed ACM). Assumed to contain asbestos in speaker boxes of other buildings, which typically will not be disturbed by this project.
 - Exterior tarry foundation damp-proofing on all 4 buildings (assumed ACM).
 - Black mastics used to secure foam insulation boards to the concrete walls in limited areas of the concrete floored utilidor.
 - Floor tile debris under access hole cut in Probation Area.
 - Cement Asbestos Board debris in crawl space under Probation
 - Hard and chalky insulation remnants from pipe valves and fittings found in dirt floor of crawl space of Detention Unit 2.
 - Cement asbestos board (CAB) panels at exterior windows, between precast concrete panels, and floor level soffits.
 - Black mastic remnants found in Detention Unit 2 under newer non asbestos floor tile and carpet.
 - Black pliable window sealants found in Dayroom of Detention Unit 2.
 - Hard and chalky insulation at pipe valves and fittings in concealed locations (Assumed).

1.3 LEAD-CONTAINING MATERIALS

- A. The following lead-containing materials are known or assumed to be present, and may be disturbed by this project. The disturbance of lead-containing materials (not just lead-based paint) is subject to compliance with OSHA regulations under 29 CFR 1926.62.
- Painted mechanical and electrical equipment.
 - Lead-containing dust in and on architectural, structural, mechanical, and electrical components.
 - Lead caulking in bell and spigot pipe joints.
 - Lead in pipe solder at copper pipe fittings.
- B. The following lead-containing materials are known or assumed to be present, and are unlikely to be disturbed by this project. The disturbance of lead-containing materials (not just lead-based paint) is subject to compliance with OSHA regulations under 29 CFR 1926.62.
- Painted interior and exterior surfaces.
 - Painted windows, doors and frames.
 - Lead-acid batteries for exit and emergency lights, and other equipment.
 - Painted structural and miscellaneous steel.

1.4 CHEMICAL HAZARDS

- A. The following chemicals are known or assumed to be present, and will be removed by this project. Items to be removed may include, but are not limited to:
- Heating system glycol.
- B. The following chemicals are known or assumed to be present, and are unlikely to be disturbed by this project. Items to be removed may include, but are not limited to:
- Mercury and mercury compounds in mercury switches in mechanical and electrical equipment and fluorescent light fixtures.
 - PCB containing ballasts and light fixture components contaminated with PCB-containing oil.
 - Electrical equipment and building components containing or contaminated with PCB-containing oil. Note: Where the ballasts have previously been replaced, fixtures and all components may be contaminated with PCB-Containing Oils, and shall either be decontaminated or disposed of as PCB contaminated equipment.
 - Heating system components with glycol.
 - Radioactive components in smoke detectors and self-illuminating exit signs.
 - Ozone Depleting Substances (ODS) in refrigeration equipment.
 - Lead-acid batteries for exit and emergency lights, and other equipment.

1.5 SUBMITTALS

- A. Submit the following documentation to the Owner for review, approval or rejection. Work shall not begin until submittals are approved. The work plan shall be signed by an EPA certified Project Designer.
- Shop drawings.
 - Work area set-up and protection.
 - Work plan with procedures for all materials affected by the work.
 - Worker protection and decontamination procedures.
 - Alaska Department of Labor & Workforce Development Notification.
 - EPA NESHAP notification, if required.
 - Lead Training certifications and EPA lead notification plan, if required.
 - Schedule.
 - Copy of Project Designer certification.
 - Independent testing laboratory and laboratory personnel.
 - Sampling plan, including number and locations of samples, tests, etc.
 - Waste transporter and disposal site designations.

- C. Close-Out Submittal: Contractor to submit the following documents to Owners representative at completion of project for review and approval:
- EPA and DOL notification.
 - Copies of worker and IH technician certifications.
 - Copies of worker refresher course certifications.
 - Waste manifests and disposal receipts.
 - Final, signed copies of air monitoring results.
 - Copies of any bulk sampling or lead testing results.
 - Signed copies of all field data sheets.
 - Signed copies of all visual inspection forms.
 - Sketches of all sample locations.
 - Daily logs with worker sign-in sheets.
 - Drawings documenting the materials and locations of all materials removed by this project.

PART 2 - PRODUCTS

- 2.1 EQUIPMENT, MATERIALS, DECONTAMINATION UNITS, DANGER AND WARNING SIGNS, HEPA FILTRATION, PRESSURE DIFFERENTIAL MONITORING EQUIPMENT, CHEMICALS, ETC: The Contractor shall provide standard commercial quality materials and equipment as required to prepare and complete the work, and as required by regulation. Provide Safety Data Sheets (SDSs) for all chemical materials brought onto the work-site.

PART 3 - EXECUTION

3.1 ESTIMATED SCOPE AND WORK PRACTICES

- A. The boiler refurbishment work shall be conducted inside of a regulated area with critical barriers with exhaust ventilation for dust control. The HEPA Filtration Unit(s) shall exhaust to the out-of-doors. If the boiler to be demolished is required to be disassembled, the work shall be conducted as described above. If the boiler to be demolished can be removed intact without disturbing any of the assumed asbestos-containing materials, then only a regulated work area setup is required. Gaskets and valve packings shall be removed intact without disturbing the asbestos-containing materials where possible. Where gaskets and valve packings are required to be disturbed, glovebag methods shall be used. A minimum of 2 stage decontamination area with wash facilities shall be utilized for this minor class 2 abatement work.
- B. The Contractor shall notify the Alaska Department of Labor. Notification to the EPA is not required, unless the quantities of RACM created to be disturbed by the project exceed notification criteria.
- C. The Contractor shall identify the presence, locations and quantities of asbestos and other hazardous materials that will be affected by this project, and conduct all removal and disposal operations in full compliance with Local, State, Federal and all other applicable regulations whether or not they are referenced herein.
- D. The Contractor shall document the location and quantities of hazardous materials removed, including sketches showing precise locations.

3.2 MONITORING

- A. All monitoring shall be performed by fully trained industrial hygiene technicians. Asbestos air samples shall be analyzed by a laboratory currently rated as proficient in the National Institute of Occupational Safety and Health (NIOSH) Proficiency in Analytical Testing (PAT) program or by microscopists listed in the American Industrial Hygiene Association (AIHA) Asbestos Analyst Registry (AAR). Lead air and dust wipe samples shall be analyzed by a laboratory currently rated as proficient as determined by ELPAT or ELLAP performance for NIOSH Method 7082 and/or NIOSH Method 7105 analytical method for the determination of lead in air and lead in paint chip, soil, and dust wipe samples. For renovation work that is regulated by 40 CFR 745, comply with any additional cleaning, inspection and testing standards of that regulation.
- B. The Contractor shall conduct asbestos worker exposure monitoring in accordance with 29 CFR 1926.1101. Personnel sampling shall include a minimum of at least three samples per 8 hour shift. Employees shall be monitored at the rate of at least one employee for every eight people performing each task in each work areas. Persons performing separate tasks or in separate work areas shall be sampled separately. The Contractor shall take a minimum of 3 air samples per day inside the work area, and 3 air samples in adjacent areas, plus at least 1 sample outside of the entrance to the work area. The Contractor shall take one air sample at the exhaust of the HEPA Filtration Unit(s), rotating between units so that each unit is monitored every 3 days.
- C. For interior work, the Contractor shall conduct lead dust wipe sampling for each lead work area without a negative initial determination. Include at least one sample immediately outside the entrance to the work area daily. For all work affecting paints or other lead-containing materials, the Contractor shall take personnel air samples in accordance with 29 CFR 1926.62. Personal samples for an employee shall include a minimum of two samples per 8 hour shift. Employees shall be monitored at the rate of at least one employee for every eight people performing each task in each work area. Persons performing separate tasks or in separate lead work areas shall be sampled separately. The Contractor shall take a minimum of two lead-in-air samples inside the work area, and two lead-in-air samples in adjacent areas
- D. Asbestos work area clearance air monitoring is required for all interior work, and shall be conducted by the Contractor's Independent Testing Laboratory subcontractor. The Independent Testing Laboratory may not be hired by the Abatement Subcontractor to perform visual inspections and clearance air monitoring. Owner approval is required before a work area is released to unprotected workers. The Contractor is responsible for all costs associated with clearance and scheduling of visual inspection and clearance air monitoring. The maximum acceptable level of airborne asbestos fibers for work area clearance is as published in 40 CFR 763 for PCM analysis. A minimum of five aggressive clearance samples are required for each work area, regardless of the type of analysis. PCM analysis (NIOSH Method 7400) is allowed. The Contractor has the option, at its expense and at no cost to the Owner, of re-cleaning the work area and repeating the clearance air monitoring procedures or of having failed phase contrast microscopy (PCM) sample media sent to their NVLAP accredited laboratory for TEM analysis by NIOSH Method 7402.

- E. For small-scale, short-duration work, such as minor penetrations of roofing with asbestos-containing remnants, gasket removal, or similar work, that work may be requested to be "cleared" on the basis of a minimum of 5 air samples taken inside the work area during the work, immediately adjacent to where removal is taking place, and where each of those air samples have fiber counts of less than 0.01 f/cc. These alternative "clearance" sampling protocols will only be allowed if fully outlined in the contractor's work plan, with specific pre-approval by the Owner. Visual inspections are required for all removal work, including small-scale, short-duration work.

- F. Lead work area clearance testing by the Contractor is required for each lead control area where the lead action level has been exceeded. Clearance testing shall be performed only after a visual inspection report by the IH Technician has documented that the work area is clean and that all lead disturbance required by the contract has been completed. Clearance testing shall include the following:
- A visual inspection report by the Contractor's IH Technician verifying that all lead disturbance required by the contract has been completed and that all visible dust and debris subject to disturbance by the planned work under this contract have been removed and the area HEPA vacuumed, wet mopped or wet wiped.
 - If the building is NOT classified as a child-occupied facility, three (3) lead wipe and/or lead soil sample results are required from within each lead control area per the Contractor's approved work plan and in accordance with NIOSH method 9100. Clearance levels shall be 200 µg/ft2 for wipes or 800 ppm in soil.

3.3 DISPOSAL

- A. The Contractor shall determine current waste handling, storage, transportation, and disposal requirements for the chosen waste disposal facilities. Contractor must comply fully with these requirements and all U. S. Department of Transportation and EPA regulations.
- B. Asbestos wastes shall be disposed of in an EPA and DEC permitted asbestos landfill.
- C. Lead-containing wastes shall be TCLP tested by the Contractor to determine if they are classified as hazardous waste. TCLP's shall be analyzed by a lab with demonstrated proficiency in performing analyses according to Method 1311 TCLP, corresponding to

the current version of Test Methods for Evaluating Solid Wastes (Chemical Physical Methods), SW-846. Evidence may include successful participation in a recognized inter-laboratory quality control program such as a laboratory certified by the California Health and Welfare Agency, Department of Health Services, or a more informal inter-laboratory quality control program.

D. Chemical hazard wastes shall be disposed of in an EPA permitted hazardous waste disposal site as required by 40 CFR 260, 40 CFR 761 and 40 CFR 763, the Contractor's approved plan, and the disposal site operator. Comply with current waste disposal, handling, labeling, storage, and transportation requirements of the waste disposal facility, U.S. Department of Transportation, and EPA regulations. Fluorescent, mercury vapor, metal halide and high pressure sodium lamps are classified by the EPA as hazardous mercury waste under the Universal Waste Rule under 40 CFR 273. Mercury and mercury-containing products are considered hazardous waste unless TCLP testing of the waste for mercury confirms the mercury content to be less than the EPA criteria of 0.2 mg/l.

E. If the project requires their disturbance, heating systems containing glycol shall be drained and all glycol collected in appropriate waste containers for recycling or disposal. Glycol shall be tested for heavy metals using the Toxicity Characteristics Leaching Procedure (TCLP). Glycol that failed the TCLP shall be packaged for disposal as hazardous waste.



PROJECT :

**MCLAUGHLIN YOUTH CENTER
BOILER RENOVATION AND REPLACEMENT**

**2600 PROVIDENCE DRIVE
ANCHORAGE, AK 99508**

SHEET TITLE :

**HAZARDS ABATEMENT -
SPECIFICATIONS**

**100% CONSTRUCTION
DOCUMENTS**

DESIGN	CTO
DRAWN	CTO
CHECKED	RAF
DATE	02/22/2017

PROJECT No.
7499

SHEET NUMBER
H102

No.	Date	Item
REVISIONS		