



**Invitation to Bid – 2014-012**  
**CONSTRUCTION**  
**Copper River School District - Kenny Lake School**  
**Wood Pellet Boiler Project**  
**Kenny Lake, Alaska**  
**ADDENDUM 5**

**September 27, 2013**

Submission of Bids (No Change)

Bidders shall submit sealed bids in single (1) copy. All Bids including any modifications or withdrawals shall be received prior to the bid opening; bids will be publically opened at Authority's Office on (Thursday) **October 17, 2013 at 2:30 p.m. Alaska time.**

Please acknowledge receipt of addenda on the most current Bid Schedule.

Addendum 5 provides additional clarification and answers the questions below:

**CLARIFICATIONS:**

- a. Where indicated "boiler manufacturer", CHANGE to "boiler supplier".
- b. REPLACE: Sheet C1.0, in its entirety, with C1.0-R, attached. It illustrates corrected location of transformer.
- c. The module enclosure may be pre-fabricated or built on-site; must meet specifications. Foundation and anchoring system must be compatible with the module enclosure design.
- d. DELETE: Item 5, Addendum 2, in its entirety. See Paragraph "b", above.
- e. An ASME stamped insulated vertical buffer tank (BT-1) of minimum capacity of 872 gallons (3300 Liters) shall be installed in the module to prevent boiler short cycling and to provide additional volume in the system for better performance of the boiler.
- f. The wood pellet fired heating module shall be of the type supplied by Fink Machine, Inc., Enderby, British Columbia, Canada (<http://www.finkmachine.com/>) using a Viessmann Kob Pyrot 400 (1.36 million BTU/hour) wood pellet-fired boiler or approved equal module from another fabricator.
- g. The wood pellet fired heating module shall have a minimum inside height of 104" and a maximum length of 40ft. The enclosure may be a steel constructed ocean "High Cube" shipping container or containers combined together at the school site. A single custom fabricated and sized container of similar construction to a standard ISO container may be used.
- h. A wood pellet silo/bin (maximum height of 20') with sloping floor and auger shall be supplied by the heating module fabricator, and shall be of a type that has been used successfully by the module fabricator in previous jobs. Capacity of the bin shall be a minimum of 35 tons and a maximum of 50 tons. The wood pellet bin shall be a minimum of six feet separation from the heating module.
- i. The module shall have its shell enclosed in R-20 insulation, in a type allowed by the Alaska State Fire Marshal. Insulation shall be attached to the module in the field, or be part of the module structure itself.
- j. The module and wood pellet silo/bin shall be placed on 8 in x 8 in treated wood foundation grade sleepers on the leveled ground specified in the site plan sheet C1.0-R of the Drawings. Contractor may use reinforced concrete foundation. In either case, the load on any portion of the foundation shall not exceed 3000 PSF. Seismic restraints shall be supplied by stainless steel cables attached to the corners of the module

(perimeter of the silo/bin, as needed) with buried “deadman” or other approved anchors, to withstand the lateral and vertical seismic forces as stated in the Plans for Kenny Lake, Alaska.

- k. The boiler supplier providing the complete shop fabricated pellet boiler heating system and enclosure shall have a minimum of three years of experience in construction of modular systems similar to the one required for this project. If the module is constructed elsewhere and assembled in Alaska, the boiler supplier shall have a minimum of three years of experience in construction of modular systems similar to the one required for this project and warrant that the enclosure is satisfactory for the intended use.
- l. Documentation of previous work shall be supplied with the Contractor’s bid, and shall consist of written description of at least three jobs, with a basic floor plans and elevations, as well as of that module’s wood pellet storage system. Pictures of the previously constructed systems may be supplied, as appropriate, to convey the exterior and interior construction of the module. Provide three references from owners of similar systems. Exclusion of this documentation may render your bid, non-responsive.
- m. At Item 7, Sheet M1.0, CHANGE TO READ: “A glycol mixing and hydronic heating fluid make-up system of 55 gallon capacity shall be installed in the module: Axiom Industries SF100 or approved equal.”

### **QUESTIONS AND RESPONSES:**

- 1. We have just received a scope of supply from one of the listed boiler manufactures and they have indicated that they will only be quoting the boiler, boiler controls, the cyclone and the boiler start-up services. The module and the remainder of the module’s internals, and, the silo will be provided by others for installation in Alaska. Will this be acceptable?

Answer: Yes. However, the BOILER SUPPLIER must warranty that the pellet boiler heat system, in its entirety, (silo; feed auger; etc.) is compatible and installed satisfactorily for operation of the boiler and other equipment supplied by the BOILER SUPPLIER; and that the pellet boiler heat system meets the “or approved equal” test; as if manufactured entirely by a boiler supplier like Fink Machine, Inc.

- 2. Addendum # 2 clarified the water storage tank, and associated PP-1 shallow well pump assembly. Please explain if the pump assembly is to bring water supply to the tank or from the tank to the boiler. Is the tank manual fill? There is no information, schematic, or similar information to give us a clue. Please provide further clarification.

Answer: At Item 8, Sheet M1.0, CHANGE “500 gallon” to “300 gallon”. Contractor shall provide 300 gallon polyethylene vertical water storage tank with a ½ hp combination pressure pump (PP-1) plumbed to the Glycol Mixing Tank (M-1) system for adding water for mixing glycol. The water storage tank will be filled with water from the school through a hose on an as needed basis. Configuration is per boiler supplier.

- 3. It is evident that there are several references to details in the documents (drawings and specifications) that are not provided. There are expectations (specifications) that are not being met by either of the specified boiler manufacturers. It would be helpful for the engineer to complete the design around at least one of the manufacturers to establish a basis for design. It’s probable that the engineer was working closely with someone on the project, however, neither of the two listed boiler manufacturers (ACTbioenergy or Viessmann) seem to have prior knowledge, and are not providing a complete module as specified. Consequently, neither of the suppliers/manufacturers can meet all of the specified criteria and they are taking multiple exceptions to the specifications. This

project, as presented, opens up a multitude of ambiguities that presents an unlevelled playing field that should not be in a lump sum, engineered project.

Answer: Note the clarification above regarding boiler supplier. Suppliers have been in the loop not the manufacturers. Suppliers do have a history of providing complete modules with pellet storage and feed augers. Specifications are based on similar systems in operation that were provided by boiler suppliers. A modular pellet boiler heat system by Fink Machine, Inc. has been identified as acceptable. The intent of the specifications is that the boiler supplier must approve all elements that comprise the pellet boiler heating system and must warrant that the components are compatible with the boiler. Suppliers often take exceptions. It's up to the contractor to determine if they are acceptable.

Attachments – Replacement Bid Schedule Addendum #5  
Drawing C1.0-R Site Plan, 1-page

End of Addendum 5.

Thank you for your interest in this procurement.

Althea S. Clapp  
Procurement Manager  
[aclapp@aidea.org](mailto:aclapp@aidea.org)

**ALASKA ENERGY AUTHORITY on behalf of Copper River School  
INVITATION TO BID 2014-012, Addendum 5  
Copper River School District, Kenny Lake School, Wood Pellet Boiler Project**

**BID SCHEDULE**

Read carefully "Information to Bidders prior to preparing this Bid Schedule. Bidders are required to bid on all bid items and include unit prices. Unit prices shall be stated in U.S. dollar figures opposite each item that appears the Bid Schedule. 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.

Base Bid:

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

<b>LUMP SUM BASE BID: \$</b>
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**Additive Alternate 1**

<b>Energy Meter System \$</b> _____
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**Acknowledge Addenda**

**Addenda 1, dated 8/6/13; 2, dated 8/8/13; 3, dated 8/14/13; 4, dated 8/22/13; 5, dated 9/27/13; \_\_\_\_\_**

**Authorized by:**

\_\_\_\_\_  
Company Submitting Bid

\_\_\_\_\_  
Alaska Business Number

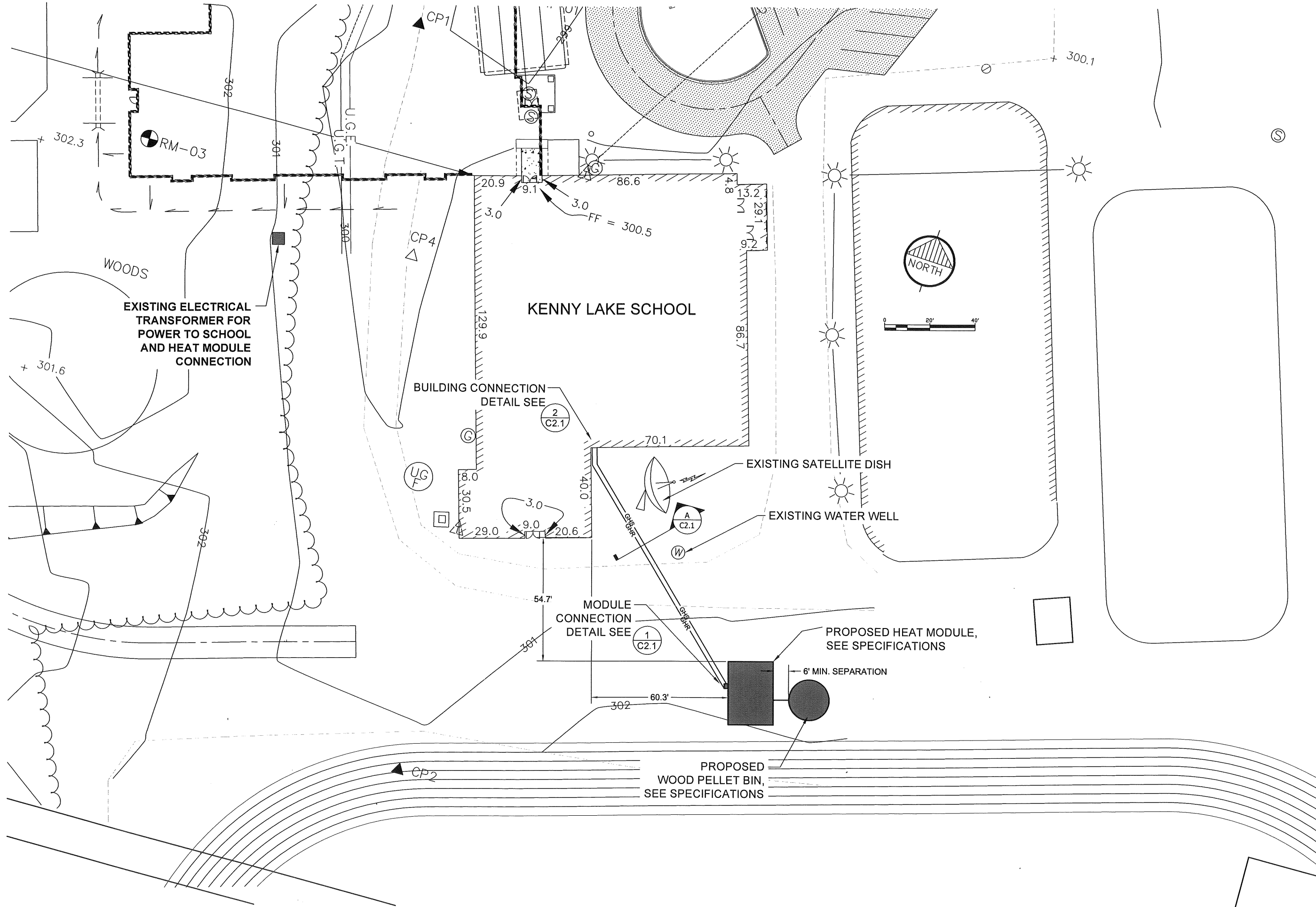
\_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Email Address

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Print Name and Title

\_\_\_\_\_  
Date

Form 00320



SCALE:  
 BAR IS ONE INCH ON ORIGINAL DRAWING  
 IF NOT ONE INCH ON THIS SHEET, ADJUST SCALES ACCORDINGLY



**SITE PLAN**  
 KENNY LAKE, ALASKA



REVISION	BY	DATE
ELEC. LOCATION	CM	9/13

Project No.	Date	Designed	Drawn	Approved
	MARCH 2012	LAP	LAW	LAP

Sheet No. **C1.0-R**