

**BOARD OF EDUCATION
UMATILLA COUNTY SCHOOL DISTRICT 8R, HERMISTON**

**There will be a Special Meeting of the
Board of Education of the Umatilla County School District 8R
at Hermiston School District Offices
Boardroom
305 S.W. 11th Street.
Hermiston, Oregon 97838
Tuesday, October 26, 2021, 6:30 PM**

**Briana Cortaberria
Executive Assistant to the
Superintendent and Board of Education**

AGENDA

1. **CALL TO ORDER SPECIAL MEETING* (6:30 p.m.)** *Chair Goller*
2. **INTRODUCTORY ITEMS (6:30 p.m.)** *Chair Goller*
 1. Pledge of Allegiance
 2. Adoption of Agenda 3
3. **PRESENTATIONS AND COMMUNICATIONS (6:35 p.m.)**
 1. School Update *Ms. Wyant*
 2. Bond Projects Update *Mr. Rogers*
4. **PUBLIC COMMENTS (7:10 p.m.)** *Chair Goller* 4

Welcome. This is the time we reserve in our meeting for public comment. Anyone wishing to address the board should stand and be recognized, then move forward to the microphone at the center table. Prior to making your comments, please state your first and last name, home address, and school or topic. Please limit your comments to a maximum of three (3) minutes and address them to me.

The Hermiston School District Board of Education also accepts public comment in writing to communications@hermistonsd.org prior to this meeting. Members of the community wishing to provide written comments submitted those statements to the district by 12:00 pm today. According to Board policy KL, any complaint regarding a specific employee of the Hermiston School District must be routed through the superintendent's office.

Is there anyone here tonight who would like to address the board?
5. **REPORTS (7:30 p.m.)**
 1. Board of Education *Chair Goller*

Board of Education Goals

 1. Academic Achievement. Schools will demonstrate continuous improvement in all measured areas for each student.
 2. Stewardship. Maintain sound fiscal stewardship of community resources consistent with board policy.
 3. Community. Schools will provide specific community outreach, at least twice annually, in culturally relevant ways to encourage parent/guardian partnerships in advancing student achievement.
 2. Superintendent's Office *Dr. Mooney*

* Timing of agenda is not meant to be time specific. Instead the time identified is for pacing purposes only. The Board of Education may modify the agenda and the order in which items are taken for consideration.

** Consent agenda items are considered for action as an entire group. Details for these items are available for public inspection at the District Office.

*** Members of the public who wish to address the Board of Education should notify the Board Chairman or Superintendent prior to the meeting. The Board of Education normally accepts public comment only at its regularly scheduled meetings. Public comment is not normally accepted at Special Meetings/work sessions.

Student Investment Account Annual Report Questions

6. STUDY ITEMS (7:50 p.m.)	
1. Board-Community Operating Agreement <i>Mr. Goller</i>	5
7. CONSENT ITEMS (8:20 p.m.)	
1. Human Resources Department	
1. Personnel Appointment	6
2. Business Office	
1. ITB 2022-1 Desert View Elementary School HVAC Upgrade	7
8. CALENDAR/FUTURE ITEMS (8:25 p.m.)	
1. Future Agenda Item Discussion <i>Mr. Goller</i>	
2. Calendar Review <i>Ms. Cortaberria</i>	36
9. ADJOURN (8:40 p.m.)	

HSD Communications YouTube Channel

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**BOARD OF EDUCATION
UMATILLA COUNTY SCHOOL DISTRICT #8R, HERMISTON
HERMISTON, OREGON**

October 25, 2021

SUPERINTENDENT'S RECOMMENDATION

2.0 INTRODUCTORY ITEMS

2.2 TOPIC: Adoption of the Agenda

It is recommended.

RECOMMENDATION:

. that the Board of Education adopts the agenda as presented.

bc

**BOARD OF EDUCATION
UMATILLA COUNTY SCHOOL DISTRICT #8R, HERMISTON
HERMISTON, OREGON**

PUBLIC COMMENT GUIDELINES

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Is there anyone here tonight who would like to address the board?

bc



Hermiston School District 8R

305 S.W. 11th Street, Hermiston, Oregon 97838

Phone: (541) 667-6000 Fax: (541) 667-6050

www.hermiston.k12.or.us

BOARD COMMITMENTS TO COMMUNITY PARTNERSHIP

2021-2022 SCHOOL YEAR

PURPOSE:

The Board of Education believes that the best interests of the district are served when citizens, district staff, and board members work together toward school improvement. To that end, the Board commits to:

1. Provide opportunity for the public to attend meetings of the board, with the exception of executive sessions, either in person or virtually.
2. Provide opportunity for public comment at board meetings in writing, in person, or virtually.
3. Make recordings of board meetings available online.
4. Host Listening and Learning sessions as an opportunity for the community to engage more informally with the board. These sessions will be held on:
 - a. October 18, 2021
 - b. January 31, 2022
 - c. April 18, 2022
5. Individually respond to email correspondence from patrons that, at a minimum, acknowledges receipt of each message.

**OARD OF EDUCATION
UMATILLA COUNTY SCHOOL DISTRICT #8R, HERMISTON
HERMISTON, OREGON**

October 26, 2021

SUPERINTENDENT'S RECOMMENDATION

7.1 CONSENT: Human Resources Department

7.1.1 TOPIC: Personnel Appointment

It is recommended.

RECOMMENDATION:

. that the Board of Education approves the appointment of the following employees:

Nikita Berger	Science Teacher	Hermiston High School
Adam Charlton	Art/Video Production Teacher	Hermiston High School
Michael Hammell	Agriculture Science Teacher	Hermiston High School
Alyxandra Rowe	Library Media Specialist	Hermiston School District
Jeffery Umbarger	Agriculture Science Teacher	Hermiston High School

**BOARD OF EDUCATION
UMATILLA COUNTY SCHOOL DISTRICT #8R, HERMISTON
HERMISTON, OREGON**

October 11, 2021

DIRECTOR OF BUSINESS SERVICES' RECOMMENDATION

7.2 CONSENT ITEMS: Business Office

7.2.1 TOPIC: ITB 2022-1 Desert View Elementary School HVAC Upgrade

It is recommended.

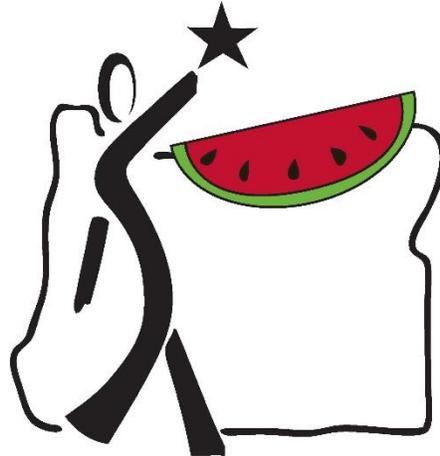
RECOMMENDATION:

. that the Board of Education authorizes the superintendent, or her designee, to enter into a contract with Apollo Mechanical Contractors for the base bid amount of \$169,069.00, for the Desert View Elementary School HVAC Upgrade, pursuant to Invitation to Bid 2022-1.

bc

HERMISTON SCHOOL DISTRICT 8R

INVITATION TO BID



SOLICITATION NUMBER: ITB 2022-1
DESERT VIEW ELEMENTARY SCHOOL HVAC UPGRADE

Due Date & Time

Wednesday, October 20, 2021 at 2:00 P.M.

Issuing Office

Hermiston School District 8R
305 SW 11th St
Hermiston, OR 97838

Contact

Katie Saul, Director of Business Services
(541) 667-6067

Katie.Saul@Hermistonsd.org

**PUBLIC IMPROVEMENT
INVITATION TO BID**

Hermiston School District 8R– Desert View Elementary School HVAC Upgrade

The Hermiston School District 8R - Desert View Elementary School HVAC Upgrade project consists of materials and labor to remove current designated HVAC equipment and install:

- Two (2) Trane Cooling coil (CLCL) Model DUFB57086G0DB138DAAA0-ADAA00
- Two (2) Trane 50-Ton Air-Cooled Condensing Unit Model RAUJC504B

Hermiston School District 8R Director of Business Services Katie Saul **will receive sealed bids in writing from qualified contractors until 2 p.m. Pacific Daylight Time, Wednesday, October 20, 2021** at the Hermiston School District Office, 305 SW 11th St, Hermiston, OR 97838 for the construction of the Desert View Elementary HVAC Upgrade at which time the bids will be opened and read aloud to all in attendance. Bids received after the time fixed for opening will not be considered. The First-Tier Subcontractor Disclosure Form must be submitted in a separate envelope within two (2) business hours after the advertised bid closing time.

PRE-BID CONFERENCE: A mandatory pre-bid conference will be held at 3:30 p.m. Pacific Daylight Time, Wednesday, October 13, 2021 at Desert View Elementary School, 1225 SW 9th Street, Hermiston, OR 97838. This mandatory pre-bid conference will meet at the front entrance of the building and then move to site tours.

BID DOCUMENTS FOR CONTRACTORS: Electronic bid documents are available at oregonbuys.gov or on the Hermiston School District website, www.hermiston.k12.or.us. Prospective Bidders must frequently check these webpages for any addenda, notices, or other updates regarding the Solicitation.

No bid shall be considered unless the bid contains a statement by the bidder, as part of his or her bid, that the provisions required by ORS 279C.800 through ORS 279C.870 (workers on public works to be paid not less than prevailing rate of wage) and 40 U.S.C. 3141 to 3148 (Davis-Bacon Act) shall be included in this contract. The current wage rates applicable to this project are available at www.boli.state.or.us.

No bid will be considered unless accompanied by certified check, cashier's check, or bid bond made payable to Hermiston School District 8R in an amount equal to ten percent (10%) of the Basic Bid. Interest will not be allowed on bid security.

It shall be understood and mutually agreed by and between the Contractor and Owner that the date of beginning and time for completion of the project are essential conditions of the contract and that the time for beginning and completion of the project shall be considered by the Owner in awarding the contract.

No bidder may withdraw his/her bid after the hour set for the opening thereof, or thereafter, before award of the contract, unless award is delayed for a period exceeding thirty (30) days from the Bid Opening date.

All questions and comments about this solicitation must be directed ONLY IN WRITING to: katie.saul@hermiston.org prior to Friday, October 15, 2021, 1:00 PM.

The Owner reserves the right to waive any irregularities in the bids, to cancel the procurement, to reject any or all bids, and to accept only such bids as may be in the Owner's best interest.

INSTRUCTIONS TO BIDDERS

SECTION 1 GENERAL

1.1 SUMMARY

- A. This construction will be carried out under one General Construction Agreement covering the construction work on this project. "The General Conditions of the Contract for Construction" of the American Institute of Architects will be referred to as the "General Conditions" throughout this Project Manual. This agreement includes all labor, materials, transportation, equipment and services necessary for and reasonably incidental to the completion of all work in connection with the project described in this Project Manual and the accompanying Drawings.

1.2 DEFINITIONS

- A. Bid Documents include the Invitation to Bid, Instructions to Bidders, the Bid Form and supporting exhibits, including any addenda issued prior to receipt of bids. Addenda are written or graphic instruments issued prior to the execution of the Contract which modify or interpret the Bid Documents by additions, deletions, clarifications or corrections. Addenda will become part of the Contract Documents when the Construction Contract is executed.

1.3 DESCRIPTION OF BID ITEMS

- A. Base Bid:
 - a. Two (2) Trane Cooling coil (CLCL) Model DUFB57086G0DB138DAAA0-ADAA00
 - b. Two (2) Trane 50-Ton Air-Cooled Condensing Unit Model RAUJC504B
 - c. Provide a crane to remove current units and set the new units on the existing roof curb
 - d. Replace all refrigerant pipes and insulation
 - e. Connect new units to current controls system and ensure proper operation
 - f. Restore power and insure proper operation
 - g. Remove all debris related to the project and dispose of old units
 - h. Provide detailed service reports and records
- B. No Substitutions or Alternative Bids will be allowed

1.4 PUBLIC WORKS

- A. This solicitation will result in a Contract for a Public Work subject to ORS 279C.800 to 279C.870 and the Davis-Bacon Act (40 U.S.C. 3141-3148). No Bid will be received or considered by the District unless the Bid contains a statement by the Bidder that the provisions of ORS 279C.800 to 279C.870 (prevailing wage rates paid to employees) and the Davis Bacon Act (40 U.S.C. 3141-3148) are to be complied with (see Bidder Certification).
- B. Contractor must be registered with the Oregon Construction Contractors Board (CCB) for a bid to be considered. In addition to specific statutory provisions cited, the Contractor shall comply with all other applicable requirements of Chapter 279C – Public Contracting, Oregon Revised Statutes.
- C. ORS 279C.505(2) requires that all public improvement contracts contain a provision requiring contractors to demonstrate that an employee drug-testing program is in place. Bidders are therefore required to certify that they have an employee drug-testing program in place that applies to all employees and will maintain a drug-testing program at all times during the performance of the awarded Contract. Failure to maintain a program will constitute a material breach of contract. The use of drugs, alcohol, or any tobacco products is prohibited on all District property.

1.5 HOURS OF LABOR

- A. Section 279C.520, Oregon Revised Statutes, provides that in all cases where labor is employed by the state, county, school district, municipality, municipal corporation or subdivision, through a Contractor, no person shall be required or permitted to labor more than 10 hours in any one day, nor more than 40 hours in any one week, except in the case of necessity, emergency, or where the public policy absolutely requires it, in which event the person or persons so employed for excessive hours shall receive at least time and one-half pay for all overtime in excess of 10 hours per day or 40 hours in any one week, and for work performed.
- B. Hours of labor shall comply with local noise ordinance.

1.6 BIDDER'S REPRESENTATION

- A. Each bidder by making their bid represents that they have read and understands the Bid Documents, and have familiarized themselves with the locale, site and conditions under which the work is to be performed. The Contractor's signature on their bid indicates acceptance of the conditions at the site of the work upon which they are bidding.

1.7 SUBMISSION OF BID

- A. All bids must be prepared on the Bid Form in this solicitation and submitted in accordance with the Instructions to Bidders. A bid is invalid if it has not been deposited at the designated location prior to the time and date for receipt of bids indicated in the Advertisement to Bid, or prior to any extension thereof issued to the bidders.
- B. Unless otherwise provided in any supplement to these Instructions to Bidders, no bidder shall modify, withdraw, or cancel their bid or any part thereof for 30 days after the time designated for the receipt of bids in the Advertisement to Bid. Prior to the receipt of bids, Addenda will be mailed or delivered to each Contractor recorded by the Architect as having received the Bid Documents and will be available for inspection wherever the Bid Documents are kept available for that purpose. Enclose the bid with attachments in a sealed envelope with the following address and identification on the face:
 - a. [Bidder's Name]
 - b. [Bidder's Address]
 - c. "DESERT VIEW ELEMENTARY SCHOOL HVAC UPGRADE"

1.8 BID GUARANTEE

- A. Attach bid security to all bids in the form of a surety bond, cashier's check, or certified check of the bidder in the amount equal to ten percent (10%) of the Basic Bid amount, made payable to Hermiston School District 8R, as a guarantee that bidder will, if awarded the Contract, execute same and furnish the specified performance and labor and materials payment bond.
- B. The Owner reserves the right to hold the bid security of the two lowest bidders until a Contract is signed, or for 30 calendar days, whichever is less. All other bid security will be returned as soon as practical. Any bidder refusing to enter into a Contract and furnish specified bonds within five calendar days after notification that their bid has been accepted, shall forfeit their bid security to the Owner as liquidated damage, but not as a penalty.

1.9 METHOD OF AWARD

- A. If the lowest basic bid by a responsible bidder does not exceed the amount of funds estimated by the Owner as available to finance the contract, the contract may be awarded on the base bid, but the Owner shall have sole discretion in also considering the beginning and completion time of the project in rejecting any base bid.
- B. At Owner's discretion, Owner may include one or more bid alternates (additive or deductive) as selected by Owner when comparing bids.

- C. The Owner reserves the right to reject any or all bids as permitted by Oregon Statute or Administrative Rule and to consider the competency and responsibility of bidders and of their proposed subcontractors in making the award.

1.10 FORM OF AGREEMENT

- A. The "Standard Form of Agreement Between Owner and Contractor," AIA Document A101-2017, shall be used in executing this Contract.
- B. The contract shall contain a provision that the Contractor shall pay and perform according to the conditions required by ORS 279C.800 to 279C.870, Prevailing Wage Rate and 40 USC § 3141 – 3148 Davis-Bacon Act.

1.11 PERFORMANCE BOND

- A. The successful bidder shall promptly furnish a Performance Bond, which shall be an Oregon Public Works Contract Bond, in compliance with the requirements of Chapter 279C.380, Oregon Revised Statutes, in an amount equal to 100 percent of the cost of the work, such bond to be written by properly qualified surety authorized to do business in the State of Oregon.

1.12 PROHIBITIONS OF ALTERATIONS (BID FORM)

- A. Except as otherwise provided herein, bids that are incomplete or are conditioned in any way, contain erasures, alterations, or items not called for in the bid, or are not in conformity with the law, may be rejected by the Owner as informal. Only the amounts and information asked for in the Bid Form will be considered as the Bid. Each bidder shall bid upon the work exactly as specified and as provided in the Bid Form.

1.13 LIST OF SUBCONTRACTORS

- A. Within two working hours of the date and time of the deadline when the bids were due to the public contracting agency for a public improvement, a bidder shall submit to the public contracting agency, in accordance with ORS 279C.370, a disclosure of any first-tier subcontractor that will be furnishing labor or materials in connection with the public improvement and whose contract value is equal to or greater than:
 - a. Five percent of the total project bid or \$15,000, whichever is larger; or
 - b. \$350,000, regardless of the percentage of the total project bid.
- B. The disclosure of first-tier subcontractors shall include:
 - a. The name of each subcontractor.
 - b. The amount of the contract of the subcontractor and the category of the subcontractor's work.
- C. Submit list of subcontractors on First-Tier Subcontractor Disclosure Form, sealed in an opaque envelope, addressed and delivered to the same location as the Bid.

1.14 SCHEDULE OF VALUES

- A. Upon request by the Owner, the selected bidder shall within seven days thereafter, submit to the owner a Schedule of Values of various parts of the work, including quantities and amount aggregating the total sum of the Contract. With each application for payment, the Contractor shall furnish a detailed statement comprising various items which represent the total amount of work completed to the date upon which application for payment is made. No application for payment will be considered unless accompanied by such a statement.

1.19 EQUAL EMPLOYMENT COMPLIANCE REQUIREMENT

- A. By submitting this bid, the bidder certifies conformance with the applicable Federal Acts, Executive Orders, and Oregon Statutes and Regulations concerning Affirmative Action toward equal employment opportunities. All information and reports required by the Federal or Oregon governments having responsibility for the enforcement of such laws shall be supplied to the

Owner upon request, for purposes of investigation to ascertain compliance with such acts, regulations, and orders.

1.20 RESIDENCY

- A. Bidders must identify whether the Bidder is or is not a "Resident Bidder," as defined in ORS 279A.120(1).
- B. Nonresident Bidders. In determining the lowest Responsive Bid, the District will, in accordance with OAR 137-046-0310, add a percentage increase to the Bid of a nonresident Bidder equal to the percentage, if any, of the preference given to that Bidder in the state in which the Bidder resides.

SECTION 2 SCHEDULES

2.1 SOLICITATION SCHEDULE:

- A. The milestones for the selection process are set forth below. The purpose of this schedule is for Bidder information only. Required dates for Contract period milestones, submittals and any other activities are provided elsewhere in this Solicitation. The District reserves the right to deviate from this schedule.

<u>Solicitation Milestone</u>	<u>Date</u>
Mandatory Pre-Bid Meeting	Wednesday, October 13, 2021, 3:30 PM
Final day for questions	Friday, October 15, 2021, 1:00 PM
Final day for addenda (if required)	Friday, October 15, 2021, 5:00 PM
Solicitation Closing/Bid Opening	Wednesday, October 20, 2021, 2:00 PM
Notice of intent to award	Thursday, October 21, 2021
Board Approval	Monday, October 25, 2021
Notice to proceed	Thursday, October 28, 2021

2.2 CRITICAL CONTRACT DATES

- A. Work to be conducted under one phase as noted below.
- B. Bidder must agree to commence work as directed in written 'Notice to Proceed' and shall be substantially complete in accordance with the following schedule:
 - a. Preparatory work may begin on date of Notice to Proceed. Preparatory work includes but is not limited to submittals, field verification, exploratory work, equipment procurement, scheduling, and any work not impacting school operations.
 - b. Primary construction operations may begin on December 20, 2021.
 - c. All project shall achieve substantial completion by January 3, 2022.
 - d. All work shall achieve final completion by June 30, 2022
- C. It is the intent of the Owner to issue a 'Notice to Proceed' for the work on or about October 28, 2021.

2.3 LIQUIDATED DAMAGES

- A. If Substantial Completion is not achieved by the agreed date or as may be adjusted pursuant to the Contract Documents, the Contractor shall pay to the Owner as liquidated damages for the loss of use of the Project the following amount: the sum of Three Hundred Dollars (\$300) for each partial day or full day of delay beyond the deadline for Substantial Completion.

**Hermiston School District 8R
Desert View Elementary School HVAC Upgrade
SOLICITATION NUMBER: ITB 2022-1**

BID SUBMISSION CHECKLIST

ALL AFFIDAVITS, CERTIFICATIONS, FORMS AND BID CONTENT ATTACHED TO THE INVITATION TO BID MUST BE INCLUDED AS PART OF THE BID RESPONSE.

The following affidavit, certifications and forms must be completed and signed by the person authorized to represent the Bidder regarding all matters related to the Bid and authorized to bind the Bidder to the agreement. Failure to submit any of the required, completed, and signed affidavits/certifications/forms may be grounds to declare the Bid nonresponsive.

___ BID FORM & CERTIFICATIONS. (Attachment A)

___ BID SECURITY (Bid Bond or payment).

___ AFFADAVIT OF NON-COLLUSION / COMPLIANCE WITH TAX LAWS. (Attachment B)

___ FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM (Attachment C)

**This checklist is provided for the Bidder's convenience in assembling their Bid
and is NOT required to be returned with the Bid**

Attachment A
BID FORM & CERTIFICATIONS
Hermiston School District 8R– Desert View Elementary School HVAC Upgrade

TO: HERMISTON SCHOOL DISTRICT 8R

FROM: _____ (Name of Bidder)

1.1 BIDDER AGREEMENT

- A. The Undersigned has:
- a. Reviewed the “Desert View Elementary School HVAC Upgrade” bid documents.
 - b. Reviewed Addenda Number(s) inclusive.
 - c. Examined the site and conditions affecting the Work.
- B. The Undersigned agrees:
- a. To hold this Bid open for 30 days subject to provisions in Bidding Requirements Document "Instructions to Bidders."
 - b. That Bid Security attached to this Bid Form is left in escrow with Hermiston School District 8R as a Bid Guarantee, subject to provisions in Bidding Requirements Document "Instructions to Bidders."
 - c. That Bid Security is not less than ten percent (10%) of the Contract Sum, and is in the form of a (choose one):
Cashier's check Certified check Bid Bond
 - d. That Bid Forms not indicating that Addenda were received prior to Bid Date may be rejected by the Owner.
 - e. That this Bid has been arrived at by the Bidder independently and has been submitted without collusion designed to limit independent bidding and competition.
 - f. They are registered with the Construction Contractors Board, or is licensed by the State Landscape Contractors Board, or licensed under ORS 468A.720 (Air Quality), if required.
 - g. Any Bid of a contractor or subcontractor listed on BOLI’s List of Ineligibles will be rejected.
- C. If awarded a contract, the Undersigned agrees:
- a. To enter into and execute a Contract on the basis of this Bid, within five (5) days from date of Notice of Acceptance of this Bid. In the event the undersigned fails or neglects to execute the Contract and the undersigned is considered having abandoned the Contract by the Owner, the Bid security will be forfeited.
 - b. To complete the Work in accordance with the Contract Documents for the amount set forth in this Bid Form.
 - c. To commence the Work no later than seven days after the date of execution of the Contract or receipt of Notice to Proceed, whichever occurs first.
 - d. To complete the Work within the time period stipulated in 2.1B of “Instructions to Bidders”.
 - e. To be bound by and will comply with the provisions of Prevailing Wage Laws ORS 279C.800 through ORS 279C.870 and the Davis-Bacon Act (40 U.S.C. 3141 to 3148), to pay workers not less than the higher of the Prevailing Wage Rates as published by the Oregon Bureau of Labor and Industries in the July 1, 2021 Prevailing Wage Rate Book and associated relevant 2021 Prevailing Wage Rate Amendments, or the Davis-Bacon Act Wage Determination
 - f. To comply with Oregon tax laws in accordance with ORS 305.385.
 - g. That the required Statutory Public Works Bond has been filed with the Construction Contractor’s Board.

- h. That it has not discriminated and will not discriminate, in violation of ORS 279A.110, against any disadvantaged business enterprise, minority-owned business, women-owned business, emerging small business, or business that a service-disabled veteran owns in obtaining any required subcontract.
- i. To demonstrate that an employee drug testing program is in place pursuant to ORS 279C.505(2).

1.2 RESIDENCY

- A. The Bidder, pursuant to ORS 279A.120 (1), (check one) is _____/is not _____ a resident Bidder. If not, indicate State of residency _____.

1.3 ACKNOWLEDGEMENT OF ADDENDA

- A. The Bidder acknowledges receipt of the following Addenda (List by number):

Addendum Number	Date
_____	_____

1.4 BID AMOUNT

- A. Basis of Award: Stipulated Sum
\$ _____ dollars.

1.5 BID ALTERNATES:

- A. No Substitutions or Bid Alternative are not allowed.

1.6 BIDDER'S SIGNATURE AND IDENTIFICATION

Please print or type all information requested below (except where signature is required) and attach Bid Security to this form.

Name of Proprietorship, Partnership, or Corporation:

Signature of Proprietor, Partner, or Corporate Official:

Name

Signature

Street Address

Name of Signatory

Mailing Address

Date Signed

City, State, and Zip Code

If Corporation, Attest:

Phone Number

Secretary of Corporation

Construction Contractors Board Number

State of Incorporation

Attachment B
AFFIDAVIT OF NON-COLLUSION / COMPLIANCE WITH TAX LAWS

_____ (Bidder)

I state that:

(1) The correct taxpayer identification numbers are:

A. Federal Employer ID Number (EIN): _____ B. Employer's Oregon ID Number: _____

(2) Bidder is not subject to backup withholding because (i) Bidder is exempt from backup withholding, (ii) Bidder has not been notified by the IRS that Bidder is subject to backup withholding as a result of a failure to report all interest or dividends, or (iii) the IRS has notified Bidder that Bidder is no longer subject to backup withholding;

(3) The price(s) and amount of this Bid must be arrived at independently and without consultation, communication or agreement with any other Supplier, Bidder or potential Bidder, except as disclosed on the attached appendix.

(4) That neither the price(s) nor the amount of this Bid, and neither the approximate price(s) nor approximate amount of this Bid, will be disclosed to any other firm or person who is a Bidder or potential Bidder, and they will not be disclosed before Contract award.

(5) No attempt has been made or will be made to induce any firm or person to refrain from proposing on this Solicitation, or to submit any noncompetitive Bid or other complementary Bid.

(6) The Bid of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Bid.

(7) _____ (name of firm), its affiliates, subsidiaries, officers, directors and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted of or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to proposing on any public contract, except as described in the attached appendix.

I state that _____ (name of firm) understands and acknowledges that the above representations are material and important, and will be relied on by the Beaverton School District in awarding the contract(s) for which this Bid is submitted. I understand and my firm understands that any misstatement in this affidavit is and will be treated as fraudulent concealment from the Beaverton School District of the true facts relating to the submission of Bids for this contract. I am authorized to act on behalf of Bidder, and have authority and knowledge regarding Bidder's payment of taxes, and to the best of my knowledge, Bidder is not in violation of any Oregon tax laws, including, without limitation, those tax laws listed in ORS 305.380(4); the elderly rental assistance program under ORS 310.630 to 310.706; and any local taxes administered by the Oregon Department of Revenue under ORS 305.620.

_____ (Affiant's Signature)

STATE OF OREGON

County of _____

Signed and sworn to before me on _____ by _____
(date) (Affiant's name)

Notary: _____

My Commission Expires: _____

Attachment C
FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

PROJECT NAME: Desert View Elementary School HVAC Upgrade

BID CLOSING DATE: October 20, 2021 – 2 p.m. LOCAL TIME

DISCLOSURE DEADLINE DATE: October 20, 2021 – 4 p.m. LOCAL TIME

This form must be submitted in a separate envelope within two (2) business hours of the advertised bid closing date and then no later than the DISCLOSURE DEADLINE stated above.

List below the Name, Dollar Value, Category of each subcontractor that will be furnishing labor or materials that are required to be disclosed. Enter "NONE" if there are no subcontractors that need to be disclosed. (If needed, attach additional sheets.)

NAME	DOLLAR VALUE	CATEGORY
1.	\$	
2.	\$	
3.	\$	
4.	\$	
5.	\$	
6.	\$	
7.	\$	
8.	\$	
9.	\$	
10.	\$	

The above listed first-tier subcontractor(s) are providing labor or materials with a Dollar Value equal to or greater than:

- a) 5% of the total Contract Price, but at least \$15,000 (add all additive alternates and subtract all deductive alternates).
- b) \$350,000 regardless of the percentage of the total Contract Price.

FAILURE TO SUBMIT THIS FORM BY THE DISCLOSURE DEADLINE WILL RESULT IN A BID SUBMITTAL BECOMING NON-RESPONSIVE, AND SUCH BIDS SHALL NOT BE CONSIDERED FOR AWARD.

Form Submitted By (Bidder Company Name): _____

Contact Name: _____ Phone No.: (____) _____

DELIVER FORM TO: _____

THIS DOCUMENT SHALL NOT BE FAXED. It is the responsibility of bidders to separately submit this disclosure form and additional sheets, with the words "DISCLOSURE FORM", the Project Name clearly marked on the envelope, at location indicated above by the specified deadline.

Attachment D Trane Submittal Information

Table Of Contents

Product Summary 1

Cooling Coils (Item A1)

 Tag Data 3

 Product Data 3

 Performance Data 3

 Mechanical Specifications 4

 Unit Dimensions 5

Air-Cooled Condensing Units (Commercial) (Item B1)

 Tag Data 6

 Product Data 6

 Performance Data 6

 Mechanical Specifications 7

 Unit Dimensions 9

 Weight, Clearance & Rigging Diagram 12

 Accessory 13

 Field Wiring 14

Field Installed Options - Part/Order Number Summary

 Air-Cooled Condensing Units (Commercial) 17

Desert View Coil and Condenser

Tag Data - Cooling Coils (Qty: 1)

Item	Tag(s)	Qty	Description	Model Number
A1	CLCL-1	1	Cooling coil (CLCL)	DUFB57086G0DB138DAAA0-ADAA00

Product Data - Cooling Coils**Item: A1 Qty: 1 Tag(s): CLCL-1**

UF coil 1/2" DX delta-flo
 Unit height coil
 Packed elbows
 Cooling unit with drain holes
 Coil for use in MCC unit (MCCA)
 Horizontal coil
 Medium coil module
 Right hand supply
 Galvanized steel casing (Std)
 4 rows
 57" (1448 mm) coil height

86" (2184 mm) finned length
 Aluminum fins
 Delta flo H (Hi efficient)
 138 fins per foot nominal fin spacing
 .016 (0.406) copper tubes
 AHRI ACHC Certified
 R-410A
 Intertwined circuits
 3/16" (5mm) Diameter Distributor Tubes
 Full Circuiting

Performance Data - Cooling Coils

Tags	CLCL-1
Actual airflow (cfm)	20000
Entering dry bulb (F)	80.00
Entering wet bulb (F)	67.00
Leaving dry bulb (F)	60.67
Leaving wet bulb (F)	58.11
Total capacity (MBh)	569.09
Volume (gal)	14.51
APD (in H2O)	0.784
Face velocity (ft/min)	586
Actual coil face area (sq ft)	34.14
Rigging weight (lb)	343.8
Number of distr - ent coil type #1 (Each)	4.00
Total cap ent coil type #1 (MBh)	569.09
Liquid temp entering TXV (F)	115.00
Saturated suction temp (F)	45.00
Suction superheat (F)	8.00
Sensible capacity (MBh)	425.10
System type	Refrigerant
Solution number (Each)	2.00

Mechanical Specifications - Cooling Coils**Item: A1 Qty: 1 Tag(s): CLCL-1****GENERAL**

Coil is manufactured by Trane. Coil is designed with aluminum plate fins and copper tubes. Fins have collars drawn, belled and firmly bonded to the tubes by means of mechanical expansion of the tubes. Coil has airflow arrow and nameplate attached to coil casing. Cooling coil performance is certified in accordance with the AHRI Forced-Circulation Air-Cooling and Air-Heating Coils Certification Program which is based on AHRI Standard 410 within the Range of Standard Rating Conditions listed in Table 1 of the Standard. Certified units may be found in the AHRI Directory at www.ahridirectory.org. Heating performance for heat pump or condenser mode is not certified.

TYPE "UF" REFRIGERANT COOLING COIL

Tubes are 1/2" (12mm) OD copper tubes. Suction and distributor headers are made of copper tubing and penetrate coil cover panel to allow for sweat connection of refrigerant lines. Coil is proof tested as standard to 715 psig (4930kPa) and leak tested to 650 psig (4482kPa), air pressure under water or equivalent tracer gas leak test. Coil is dried after testing and filled with a 10 psig (69kPa) holding charge of dry air or nitrogen. Coil has a vertical distributor to ensure that each coil circuit receives the same amount of refrigerant liquid. Refrigeration specialties such as TXV valves, line driers, sight glasses, etc., are not included from the factory and must be field supplied.

COIL TUBES

Tubes are 1/2" [13 mm] OD .016" [0.406 mm] thick copper.

COIL CASING

Coil casing is manufactured with galvanized steel.

COIL PLATE FIN TYPE

Aluminum plate fin is Trane DELTA FLO H (Hi-Efficient) fin design.

COIL SUPPLY CONNECTION

Coil supply connection is on right side of coil (facing airflow).

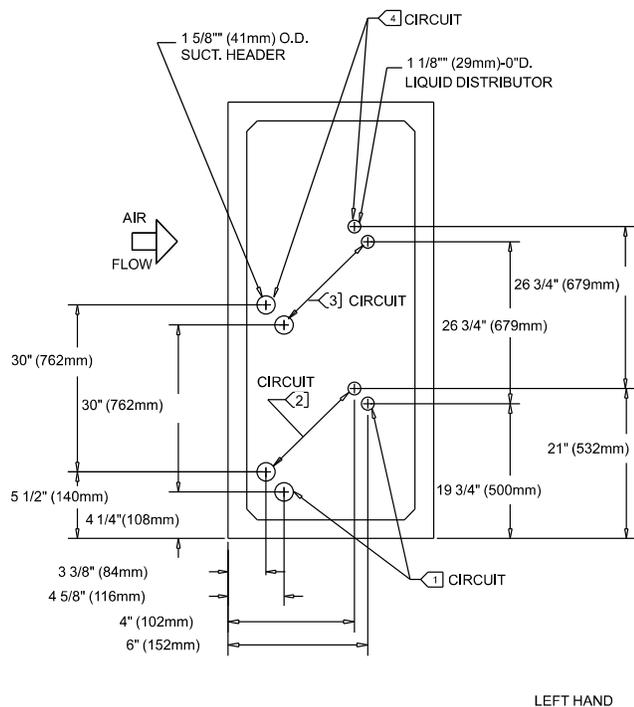
COIL CIRCUITING

Coil has intertwined circuiting.

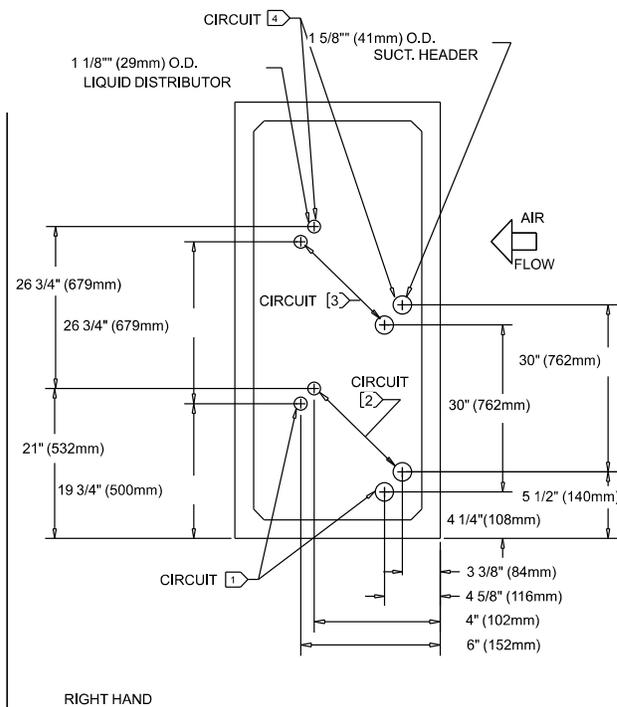
PACKED ELBOW

DX coil is furnished with factory mounted and tested packed elbow brazed to each distributor. Packed elbows are used on Trane DX coils mounted in Trane Central Station Air Handlers. Packed elbows allow the refrigerant distributor to be mounted in vertical position while still allowing horizontal TXV connection.

Desert View Coil and Condenser
Unit Dimensions - Cooling Coils
Item: A1 Qty: 1 Tag(s): CLCL-1



LEFT HAND



RIGHT HAND

Desert View Coil and Condenser

Tag Data - Air-Cooled Condensing Units (Commercial) (Qty: 1)

Item	Tag(s)	Qty	Description	Model Number
B1	50 Ton	1	20-60 Ton Air-Cooled Condensing Unit (RA	RAUJC504B

Product Data - Air-Cooled Condensing Units (Commercial)**Item: B1 Qty: 1 Tag(s): 50 Ton**

Condenser: Air-cooled
 R-410A refrigerant
 50 ton unit
 460 Volt 60 Hertz 3 Phase
 No controls
 Low ambient damper(s) control
 cULus approval
 Suction service valve
 Neoprene isolators (unit) (Fld)

Performance Data - Air-Cooled Condensing Units (Commercial)

Tags	50 Ton
Net total capacity (MBh)	690.77
Ambient (F)	95.00
Compressor power (kW)	54.14
Cond fan motor power (kW)	5.37
Total power (Cond only) (kW)	59.51
EER @ AHRI (Cond only) (EER)	11.6
Min circuit ampacity (A)	102.00
Max overcurrent protection (A)	110.00
Recommended dual element (A)	110.00
Compressor 1 RLA (A)	22.20
Compressor 1 count (Each)	2.00
Compressor 2 RLA (A)	20.20
Compressor 2 count (Each)	2.00
Condenser motor FLA (A)	1.80
Condenser motor count (Each)	6.00
Suction line size-horizontal	2-1/8 in.
Suction line size - vertical	1-5/8 in.
Liquid line size	7/8 in.
Refrigerant type	R410a
Refrigerant charge(no evap) - 50 ft (lb)	25.0
Refrigerant charge(no evap) - 100 ft (lb)	38.0
Refrigerant charge(no evap) - 150 ft (lb)	50.0
Liquid temp ent expansion device (F)	103.34
Min operating weight (lb)	2901.0
Max operating weight (lb)	3325.0
Application type	Standalone RAUJ Condenser
Saturated Suction Temperature (F)	45.00

Mechanical Specifications - Air-Cooled Condensing Units (Commercial)**Item: B1 Qty: 1 Tag(s): 50 Ton****General - R410A**

All air-cooled condensing units shall have scroll compressors and are factory assembled and wired. Each unit shall ship from the factory with a nitrogen holding charge. Units shall be constructed of 14-gauge welded galvanized steel frame with 14 and 16-gauge galvanized steel panels and access doors. Units shall have factory mounted, louvered, full-length steel grilles to protect the condenser coils and piping. Unit surface shall be phosphatized and finished with an air-dry paint. This air-dry paint finish shall be durable enough to withstand a minimum of 672-consecutive-hour salt spray application in accordance with standard ASTM B117.

Compressors - R-410A

Trane 3-D Scroll compressors have simple mechanical design with only three (3) major moving parts. Scroll type compression provides inherently low vibration. 3-D compressors provide a completely enclosed compression chamber with no leakage paths. The compressor is suction gas cooled, direct drive, 3600 RPM hermetic motors. The Scroll compressor includes a centrifugal oil pump, oil level sight glass, and an oil charging valve.

Refrigerant Management - R-410A

Split systems can have significantly more refrigerant than packaged systems and thus require controls to reliably manage this excess refrigerant. Each compressor shall have crankcase heaters installed, properly sized to minimize the amount of liquid refrigerant present in the oil sump during off cycles. Additionally, the condensing unit shall have controls to initiate refrigerant isolation at system shut down on each refrigerant circuit. To be operational, the refrigerant isolation cycle requires a field-installed isolation solenoid valve on the common liquid line near the evaporator.

Note: Under extreme conditions, R410a refrigerant can present special challenges with piping and system design. Whenever refrigerant line set lengths approach 150 equivalent feet and/or design ambient temperature exceeds 115 degrees F, contact your Trane Account Executive to review application requirements.

Unit Control - R410A

Factory provided 115-volt control circuit includes fusing and control power transformer. The unit is wired with magnetic contactors for compressor and condenser motors, three-leg solid-state compressor overload protection, and high/low pressure cutouts. Charge isolation, reset relay and anti-recycle compressor timer is provided. Across-the-line start is standard.

Dual Circuit, Condenser Coils for 40-60 Ton Units - R-410A

Condenser coils are dual circuited having an Aluminum Microchannel design. The coils are burst tested and leak tested. Factory installed liquid line service valves are standard.

Dual Refrigerant Circuit w/Four Capacity Stages for 40-60 Ton Units - R410A

Each unit has dual refrigeration circuits. Each circuit has two (2) compressors manifolded together utilizing a passive oil system. Each unit has four capacity stages. Capacity modulation is accomplished by turning compressors on and off.

Condenser Fans - R-410A

Condenser fans are direct driven with motors having thermal overload protection and permanently lubricated ball bearings.

No System Control - R-410A

No System Control provides a terminal strip for step control provided by others. The system provides internal 3 minute fixed on and 5 minute fixed off time delays and compressor contactors. Each unit is equipped with a phase loss/reversal/low voltage monitor which protects 3-phase equipment from phase loss, phase reversal, and low voltage. Any fault condition will produce a Failure Indicator LED, and send the unit into an emergency stop condition. The system temperature ?step? controller must be field provided and installed.

Note: For No Controls units with system temperature ?step? controllers provided by others, the controller must include 5 minute on/off interstage timers to coordinate with the units fixed on/off time delay relays.

Low Ambient Control R-410A

Low ambient option extends unit operation from 40 F to 0 F [4.5 to -17.8 C] by utilizing an external damper assembly for head pressure control.

Neoprene Vibration Isolators - R-410A

Neoprene-in shear isolators are supplied for field installation under the unit base to minimize transmission of unit vibration. The isolators consist of a steel top plate and base completely imbedded in color coded oil-resistant neoprene

Desert View Coil and Condenser

stock. Mountings have deflection of 1/4".

Field Installed; 30% Bleed Valve TXV

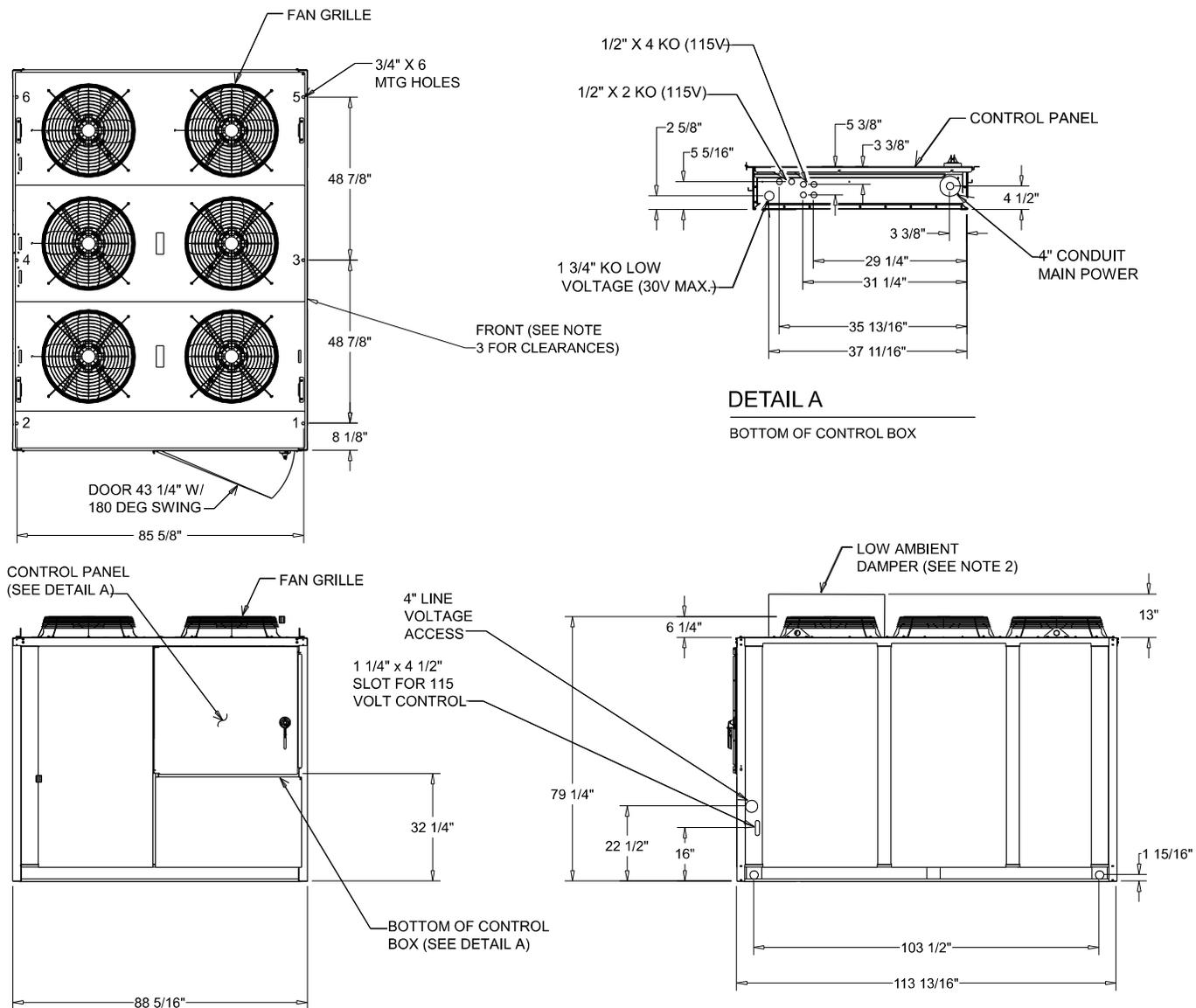
Installation shall require use of 30% bleed, Thermal Expansion Valves. Valves shall be field supplied and field installed. Quantity and size shall be determined by the application.

Note: Liquid line solenoids are required for all applications. Trim solenoids cannot be used.

Desert View Coil and Condenser
Unit Dimensions - Air-Cooled Condensing Units (Commercial)
Item: B1 Qty: 1 Tag(s): 50 Ton

NOTES:

1. SEE CONNECTION DRAWING FOR CONNECTION LOCATION AND SIZES.
2. LOW AMBIENT DAMPER ONLY COMES WITH SELECTED UNIT .
3. FRONT & BACK OF UNIT CLEARANCE 72" . LEFT & RIGHT SIDE OF UNIT CLEARANCE 42"



50 TON UNIT

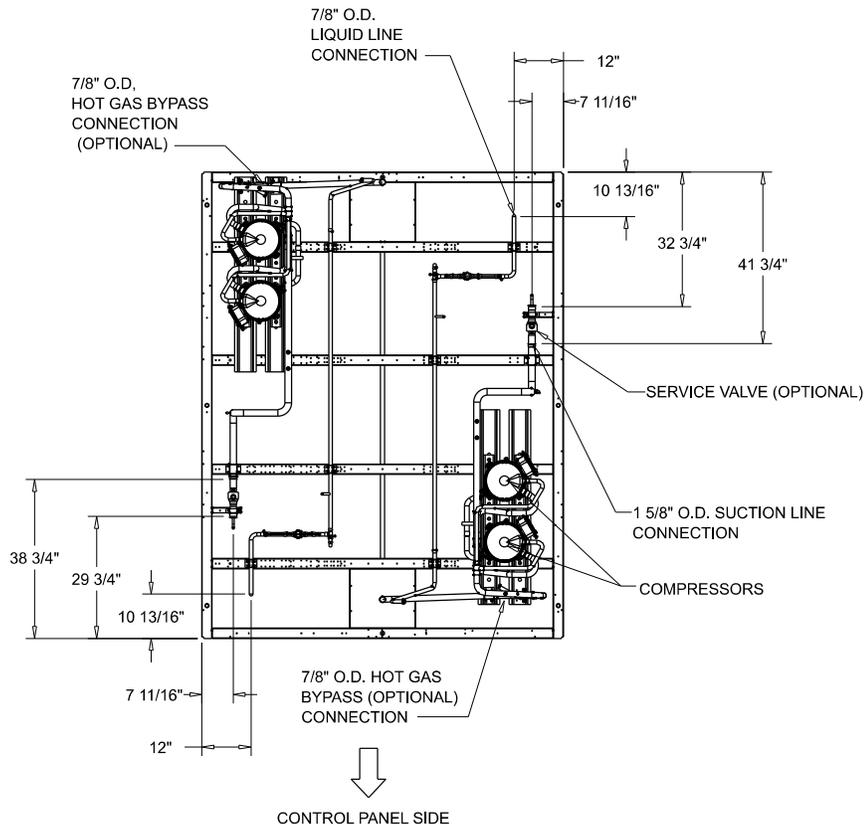
DIMENSIONAL DRAWING

Desert View Coil and Condenser

Unit Dimensions - Air-Cooled Condensing Units (Commercial)

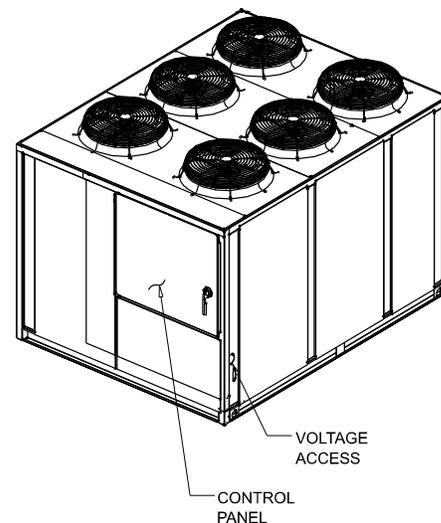
Item: B1 Qty: 1 Tag(s): 50 Ton

NOTES:
1. VERIFY WEIGHTS, CONNECTIONS, AND ALL DIMENSIONS WITH TRANE INSTALLATION OPERATION MAINTENANCE (IOM) DOCUMENTS BEFORE INSTALLATION.



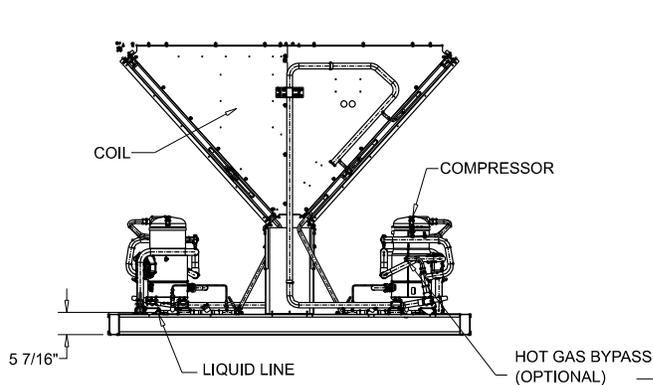
PLAN VIEW OF UNIT

CONNECTION DRAWING



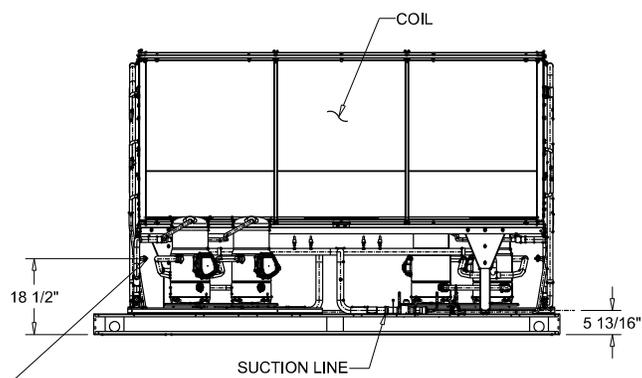
ORIENTATION VIEW OF UNIT

ISOMETRIC DRAWING



CONTROL PANEL (LEFT) SIDE VIEW OF UNIT

CONNECTION DRAWING



BACK VIEW OF UNIT

CONNECTION DRAWING

50 TON UNIT

DIMENSIONAL CONNECTION DRAWING

Desert View Coil and Condenser

Unit Dimensions - Air-Cooled Condensing Units (Commercial)

Item: B1 Qty: 1 Tag(s): 50 Ton

GENERAL ELECTRICAL DATA

<p>GENERAL</p> <p>Tonnage / kW: 50 [176.0 kW] Unit Operating Voltage Range: 414-506 Unit Primary Voltage: 460 Unit Hertz: 60 Unit Phase: 3 Minimum Circuit Ampacity: (3) 102.00 A Maximum Overcurrent Protection Device: (2) 110.00 A Recommended Dual Element Fuse: (4) 110.00 A</p>	<p>OUTDOOR MOTOR</p> <p>Number: 6 Horsepower: 1.0 Motor Speed (rpm): 1,140 Outdoor Motor Full Load amps: 1.8 Outdoor Motor Locked Rotor amps: 9.0</p>
<p>COMPRESSOR</p> <p>Circuit A1/A2 - Circuit B1/B2</p> <p>Tons (ea): 11.5 / 13.5 - 11.5 / 13.5 Compressor Rated Load Amps (ea): 20.2 / 22.2 - 20.2 / 22.2 Locked Rotor Amps (ea): 158.0 / 158.0 - 158.0 158.0</p>	<p>REFRIGERANT OPERATING CHARGE (Cond Only, per Circuit)</p> <p>Type: R410A Number of Circuits: 2 Condenser Storage Capacity: 25.0 lb Refrigerant Operating Charge (Condenser Only) : 23.4 lb</p>

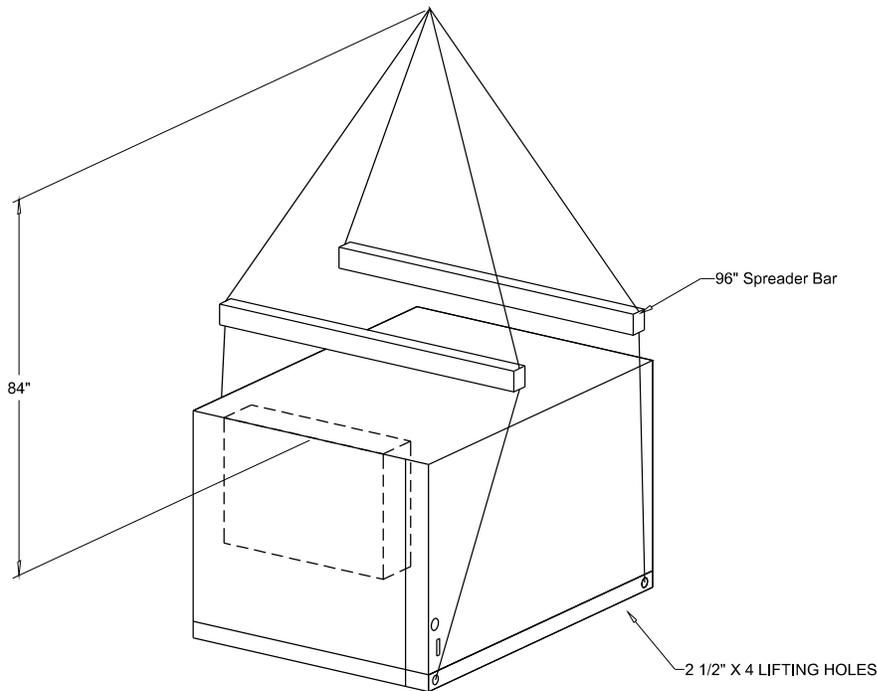
Notes:

1. Electrical data is for each individual motor.
2. Maximum overcurrent protection permitted by nec 440-22 is 225 percent of largest compressor motor RLA plus the remaining motor RLA and FLA values.
3. Minimum circuit ampacity is 125 percent of the largest compressor motor RLA plus the remaining motor RLA and FLA values.
4. Recommended dual element fuse size is 150 percent of the largest compressor motor RLA plus the remaining motor RLA and FLA values.
5. Local codes may take precedence.
6. Electrical data is pulled from TOPSS (performance engine). If data is missing please check TOPSS.

Desert View Coil and Condenser

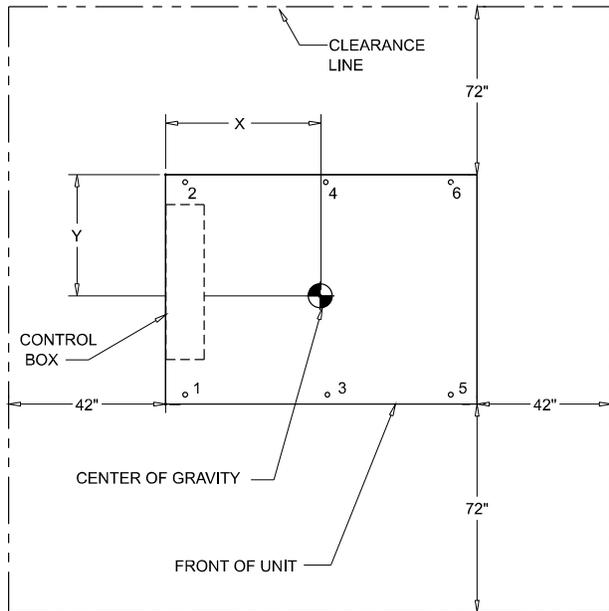
Weight, Clearance & Rigging Diagram - Air-Cooled Condensing Units (Commercial)

Item: B1 Qty: 1 Tag(s): 50 Ton



50 TON RIGGING

WEIGHT AND RIGGING



WEIGHTS AND LOAD POINTS

OPERATING:	2868.0 lb
SHIPPING:	2826.0 lb
LOAD POINTS 1 :	365.5 lb
LOAD POINTS 2 :	331.0 lb
LOAD POINTS 3 :	427.8 lb
LOAD POINTS 4 :	393.3 lb
LOAD POINTS 5 :	700.1 lb
LOAD POINTS 6 :	650.3 lb

*ALL WEIGHTS ARE APPROXIMATE

CENTER OF GRAVITY

X:	52 5/16"
Y:	45 7/8"

ADD WEIGHTS

SHIPPING:
OPERATING:

NOTES:

1. OPERATING WEIGHT INCLUDES REFRIGERANT, OIL AND WATER.
2. SHIPPING WEIGHT INCLUDES REFRIGERANT AND OIL CHARGES
3. THE ACTUAL WEIGHT IS SHOWN ON THE NAMEPLATE. WEIGHT SHOWN REPRESENT TYPICAL SHIPPING AND OPERATING WEIGHTS FOR THE UNIT SELECTED.
4. ADD WEIGHT TO TOTAL WEIGHT OF UNIT
5. IF UNITS IS INSTALLED IN A WELL, THE DEPTH OF THE WELL MUST NOT EXCEED THE TOP HEIGHT OF THE UNIT. THE TOP OF THE UNIT MUST HAVE UNRESTRICTED AIRFLOW. PLEASE REFERENCE RECOMMENDED CLEARANCES.

WARNING!

TO PREVENT INJURY OR DEATH AND POSSIBLE EQUIPMENT DAMAGE, DO NOT USE CHAIN (CABLES) OR SLINGS EXCEPT AS SHOWN AND USE CABLES STRONG ENOUGH TO SUPPORT UNIT WEIGHT. TEST LIFT UNIT TO ENSURE PROPER BALANCE AND RIGGING.

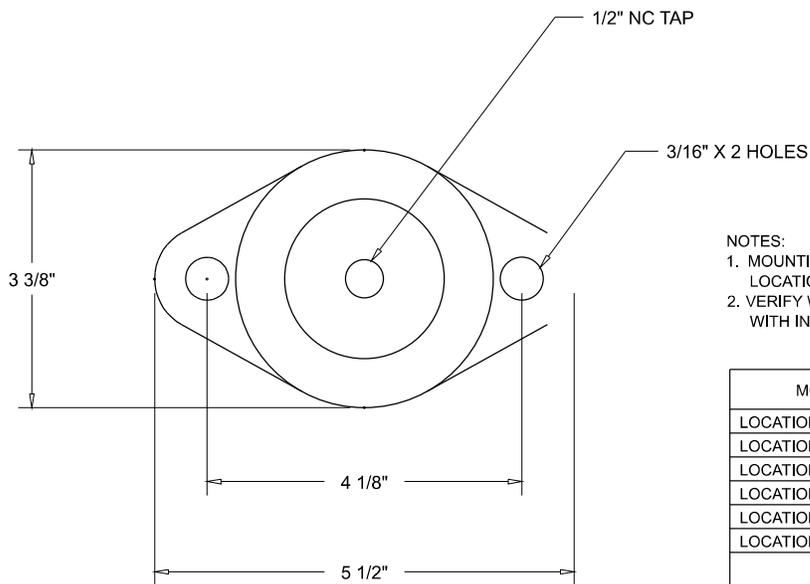
50 TON CENTER OF GRAVITY AND CLEARANCES

WEIGHT AND RIGGING

Desert View Coil and Condenser

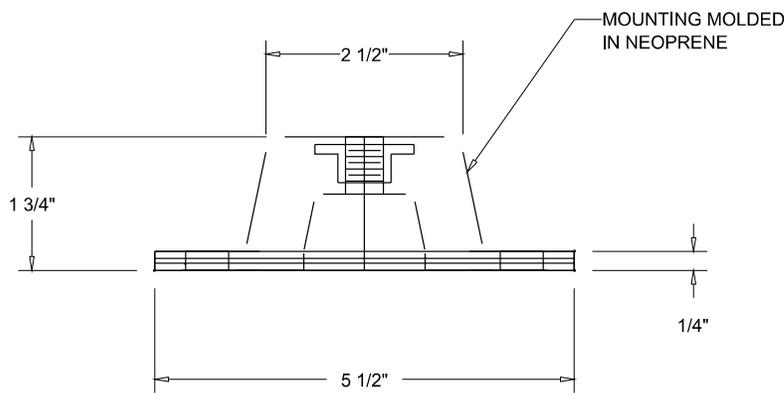
Accessory - Air-Cooled Condensing Units (Commercial)

Item: B1 Qty: 1 Tag(s): 50 Ton



- NOTES:
1. MOUNTING LOCATIONS CORRELATE WITH MOUNTING LOCATIONS SHOWN IN CLEARANCE DRAWING.
 2. VERIFY WEIGHT, CONNECTION, AND ALL DIMENSION WITH INSTALLER DOCUMENTS BEFORE INSTALLATION

MOUNTING LOCATIONS	
LOCATION 1	R-3-RED
LOCATION 2	R-3-RED
LOCATION 3	R-3-RED
LOCATION 4	R-3-RED
LOCATION 5	R-3-GREEN
LOCATION 6	R-3-GREEN



MOUNTING ISOLATOR (NEOPRENE)

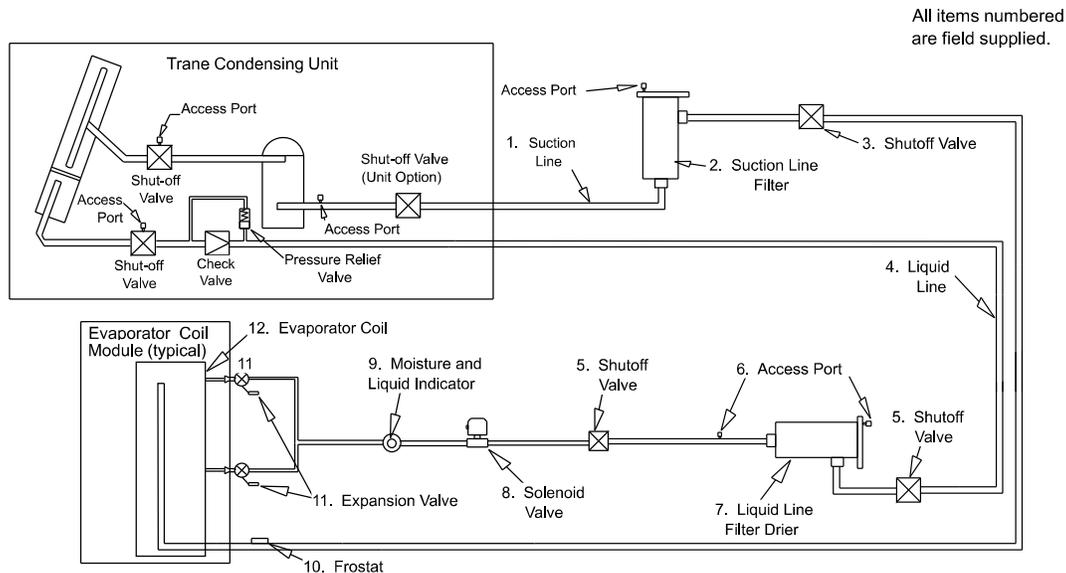
DIMENSIONAL ACCESSORIES DRAWING

Desert View Coil and Condenser

Field Wiring - Air-Cooled Condensing Units (Commercial)

Item: B1 Qty: 1 Tag(s): 50 Ton

Required Components for Refrigerant Circuits



SUCTION LINE

1. Interconnected Tubing (Suction line)

Maximum of 50 feet if condenser is above evaporator (If risers are more than 50 feet, the application must be viewed by Trane) Refer to SS-APG012-EN for more details

2. Suction Line

Filter Drier 1 / ckt suction filter should be the replaceable-core type, and a clean core should be installed after the system is cleaned up

3. Shut-Off Valve

Manual ball valves for 2 1/8" tubing.

LIQUID LINE

4. Interconnected Tubing (Liquid Line)

Refer to applications guide SS-APG012 - EN for vertical & horizontal piping limitations.

5. Shut-Off Valve

2 Manual ball valves

6. Access Port

Port used to determine suction pressure. This port is usually a Schraeder valve with a core.

7. Liquid Line

Filter Drier 1 / ckt liquid filter should be the replaceable-core type, and a clean core should be installed after the system is cleaned up.

8. Solenoid Valves

Liquid line requires a field supplied and installed isolation solenoid valve within 10 feet of the evaporator. The suggested solenoid uses a 120-volt service and requires code-compliant wiring to the RAUJ condensing unit.

Note: Trim solenoids cannot be used. They are not compatible with Microchannel condenser coils

9. Moisture and Liquid Indicator

One moisture-indicating sight glass is to be installed in the main liquid line.

Desert View Coil and Condenser

Field Wiring - Air-Cooled Condensing Units (Commercial)

Item: B1 Qty: 1 Tag(s): 50 Ton

EVAPORATOR

10. Froststat (not required) - The control is mechanically attached to the outside of the refrigerant line, near the evaporator, and wired to the unit control panel See application guide SS-APG012-EN for selection information.

11. Expansion Valves - See application guide SS-APG012-EN for selecting valve quantity and size.

Note: Units with Microchannel condenser coils applied with DX systems will require 30 percent bleed valves.

Expansion Valves for 20-60T MCHE (30 percent Bleed) Evap Circuit Tonnage

REFRIGERANT	MIN.	MAX.	SPORLAN MODEL NUMBER	TRANE PART
R-410A	2.0	3.0	BBIZE-1-1/2-GA (BP/30)	VAL10487
R-410A	2.5	3.5	BBIZE-2-GA (BP/30)	VAL10488
R-410A	3.5	5.0	BBIZE-3-GA (BP/30)	VAL10489
R-410A	4.5	7.0	BBIZE-4-GA (BP/30)	VAL10490
R-410A	6.0	8.5	BBIZE-5-GA (BP/30)	VAL10491
R-410A	7.0	10.0	BBIZE-6-GA (BP/30)	VAL10492
R-410A	8.0	13.5	BBIZE-8-GA (BP/30)	VAL10493
R-410A	11.0	17.5	BBIZE-12-1/2-GA (BP/30)	VAL10494
R-410A	14.0	21.5	BBIZE-15-GA (BP/30)	VAL10495
R-410A	17.0	28.5	OZE-20-GA (BP/30)	VAL10496
R-410A	22.0	30.0	OZE-25-GA (BP/30)	VAL10497

(1) Ton per distributor, choose the valve that matches the evap coil circuit capacity that it serves.

(2) Provide and install one expansion valve per distributor.

Refrigerant Charge and Maximum Line Length

Total interconnecting line length (per circuit)	50 ft	100 ft	150 ft
Condenser and line set approx. refrigerant charge (per circuit) - evaporator charge not included	25.0 lb	38.0 lb	50.0 lb

If total interconnecting line length is more than 150 feet, the application must be reviewed by Trane.

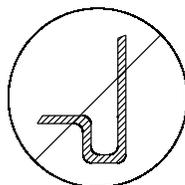
**Contact product support for information on refrigeration components and piping applications assistance

***Data in table is pulled from TOPSS selection. If N/A is present, please refer to unit IOM.

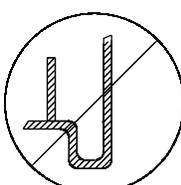
Installation Guidelines

Suction Line Piping

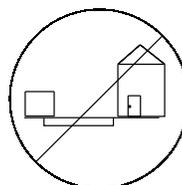
1. Do not use suction line traps.



2. Do not use double risers.



3. Avoid putting suction lines underground.



4. Route suction lines as short and direct as possible.

5. Slope suction line away from the condensing unit 1 inch for every 10 feet.

6. Insulate suction line.

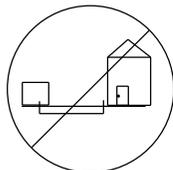
7. The suction filter should be located as close to the compressors as possible.

Desert View Coil and Condenser**Field Wiring - Air-Cooled Condensing Units (Commercial)****Item: B1 Qty: 1 Tag(s): 50 Ton**

Required Components for Refrigerant Circuits Continued

Liquid Line Piping

1. Avoid putting liquid lines underground.



2. Route liquid lines as short and direct as possible.
3. Slope liquid line away from the condensing unit 1 inch for every 10 feet.
4. Only insulate liquid lines that pass through heated areas.
5. Wire solenoid valve per field connection diagram.
6. The liquid line filter drier should be as close to the solenoid valve as possible.

Evaporator Piping

1. Install TXV directly to unit liquid connection.
2. Locate TXV bulb midway between 90F bends on top of suction tube as shown.
3. Secure bulb to tube with the two clamps provided by the manufacturer and insulate bulb.
4. Install the TXV equalizer line close to & downstream of the bulb, on top of the horizontal suction line.
5. Install frostat per kit instructions on the common suction line as close to the evaporator as possible.

See SS-APG012-EN for DX evaporator piping details.

Field Installed Options - Part/Order Number Summary

This is a report to help you locate field installed options that arrive at the jobsite. This report provides part or order numbers for each field installed option, and references it to a specific product tag. It is NOT intended as a bill of material for the job.

Product Family - Air-Cooled Condensing Units (Commercial)

Item	Tag(s)	Qty	Description	Model Number
B1	50 Ton	1	20-60 Ton Air-Cooled Condensing Unit (RA	RAUJC504B

Field Installed Option Description	Part/Ordering Number
Neoprene isolators (unit)	

Board Members

Tue Oct 26, 2021

6:30pm - 8pm Board Special Meeting

Where: DO Boardroom
Calendar: Board Members
Created by: Briana Cortaberria

Wed Oct 27, 2021

3:45pm - 4:45pm Ed Council Meeting

Where: DO Boardroom
Calendar: Board Members
Created by: Briana Cortaberria

Wed Nov 3, 2021

8am - 9am Board Agenda Review

Where: DO Supt's CR
Calendar: Board Members
Created by: Briana Cortaberria

9:30am - 10:30am Finance Committee Meeting

Where: Superintendent's Conference Room
Calendar: Board Members
Created by: Briana Cortaberria

Mon Nov 8, 2021

5:30pm - 7pm Board Regular Meeting

Calendar: Board Members
Created by: Briana Cortaberria

Tue Nov 9, 2021

8am - 8:30am KOHU Odds & Ends Show

Where: KOHU
Calendar: Board Members
Created by: Briana Cortaberria
Who: Tricia Mooney, kohunews@gmail.com

Wed Nov 10, 2021

8am - 9am Board Meeting Debrief

Where: DO Supt's CR
Calendar: Board Members
Created by: Briana Cortaberria

Sat Nov 13, 2021

8:15am - 9:15am OSBA 2021 Annual Membership Meeting

Where:
https://us02web.zoom.us/j/85310584977?tk=qKZomCawXDr_Tq1dRzcNGalo6jjA-PeBUjjphCkMqvs.DQMAAAAT3Og4kRZnRGc1bUZEMFJ5V3VxUFJvbWIIWmFBAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA&pwd=WnZkNkIFcFdkdmZyeTIwa1M2QWdsQT09&uuiid=WN_CMLzGkXQToOwiHe0QXjFWg
Calendar: Board Members
Created by: Briana Cortaberria

Mon Nov 15, 2021

6pm - 7:30pm Elementary Boundary Committee Meeting

Calendar: Board Members
Created by: Briana Cortaberria

Thu Nov 18, 2021

7am - 8am HAT/HSD Meeting

Where: DO Boardroom
Calendar: Board Members
Created by: Briana Cortaberria

Board Members

Mon Nov 22, 2021

6:30pm - 8pm Board Special Meeting

Where: DO Boardroom
Calendar: Board Members
Created by: Briana Cortaberria

Wed Nov 24, 2021

8:30am - 9:30am Finance Committee Meeting

Where: Superintendent's Conference Room
Calendar: Board Members
Created by: Briana Cortaberria

Mon Nov 29, 2021

6pm - 7:30pm Elementary Boundary Committee Meeting

Calendar: Board Members
Created by: Briana Cortaberria

Wed Dec 8, 2021

8am - 9am Board Agenda Review

Where: DO Supt's CR
Calendar: Board Members
Created by: Briana Cortaberria

Mon Dec 13, 2021

6:30pm - 8pm Board Regular Meeting

Calendar: Board Members
Created by: Briana Cortaberria

Tue Dec 14, 2021

8am - 8:30am KOHU Odds & Ends Show

Where: KOHU
Calendar: Board Members
Created by: Briana Cortaberria
Who: Tricia Mooney, kohunews@gmail.com

Wed Dec 15, 2021

8am - 9am Board Meeting Debrief

Where: DO Supt's CR
Calendar: Board Members
Created by: Briana Cortaberria

Thu Dec 16, 2021

7am - 8am HAT/HSD Meeting

Where: DO Boardroom
Calendar: Board Members
Created by: Briana Cortaberria

Wed Dec 22, 2021

8:30am - 9:30am Finance Committee Meeting

Where: Superintendent's Conference Room
Calendar: Board Members
Created by: Briana Cortaberria

Mon Dec 27, 2021

6:30pm - 8pm Board Special Meeting

Where: DO Boardroom
Calendar: Board Members
Created by: Briana Cortaberria

Board Members

Wed Jan 5, 2022

8am - 9am Board Agenda Review

Where: DO Supt's CR
Calendar: Board Members
Created by: Briana Cortaberria

Mon Jan 10, 2022

6:30pm - 8pm Board Regular Meeting

Calendar: Board Members
Created by: Briana Cortaberria

Tue Jan 11, 2022

8am - 8:30am KOHU Odds & Ends Show

Where: KOHU
Calendar: Board Members
Created by: Briana Cortaberria
Who: Tricia Mooney, kohunews@gmail.com

Wed Jan 12, 2022

8am - 9am Board Meeting Debrief

Where: DO Supt's CR
Calendar: Board Members
Created by: Briana Cortaberria

Thu Jan 20, 2022

7am - 8am HAT/HSD Meeting

Where: DO Boardroom
Calendar: Board Members
Created by: Briana Cortaberria

Mon Jan 24, 2022

6:30pm - 8pm Board Special Meeting

Where: DO Boardroom
Calendar: Board Members
Created by: Briana Cortaberria

Wed Jan 26, 2022

8:30am - 9:30am Finance Committee Meeting

Where: Superintendent's Conference Room
Calendar: Board Members
Created by: Briana Cortaberria

Mon Jan 31, 2022

6pm - 8pm Listening & Learning Placeholder

Where: DO Boardroom
Calendar: Board Members
Created by: Briana Cortaberria

Sun	Mon	Tue	Wed	Thu	Fri	Sat
3	4 6pm - Elementary Boundary	5 4pm - Girls Varsity Softball - 6pm - Girls Varsity Softball - 7pm - Girls Varsity Volleyball vs	6 8am - Board Agenda Review @	7 7pm - Girls Varsity Soccer vs	8 7pm - Boys Varsity Football vs	9 7pm - Girls Varsity Soccer vs
10	11 6:30pm - Board Regular	12 8am - KOHU Odds & Ends 4pm - Girls Varsity Softball - 6pm - Girls Varsity Softball - 7pm - Girls Varsity Soccer vs 7pm - Girls Varsity Volleyball vs	13 8am - Board Meeting Debrief 1:30pm - Bond Project Site Visit 6pm - Bond Oversight	14	15	16
17	18 6pm - Elementary Boundary 7pm - Listening & Learning	19	20 5pm - OSBA Fall Regional	21 7am - HAT/HSD Meeting @ DO	22 7pm - Boys Varsity Football vs	23
24	25 7pm - Volleyball vs Kamiakin @	26 6:30pm - Board Special	27 3:45pm - Ed Council Meeting	28	29	30
31	1	2	3 8am - Board Agenda Review @ 9:30am - Finance Committee	4	5	6

Sun	Mon	Tue	Wed	Thu	Fri	Sat
31	1	2	3 ● 8am - Board Agenda Review @ ● 9:30am - Finance Committee	4	5	6
7	8 ● 5:30pm - Board Regular	9 ● 8am - KOHU Odds & Ends	10 ● 8am - Board Meeting Debrief	11	12	13 ● 8:15am - OSBA 2021 Annual
14 6pm - Elementary Boundary	15	16	17	18 ● 7am - HAT/HSD Meeting @ DO	19	20
21 ● 6:30pm - Board Special	22	23	24 ● 8:30am - Finance Committee	25	26	27
28 6pm - Elementary Boundary	29	30	1	2	3	4

Sun	Mon	Tue	Wed	Thu	Fri	Sat
28	29 6pm - Elementary Boundary	30	1	2	3	4
5	6	7	8 8am - Board Agenda Review @	9	10	11
12	13 6:30pm - Board Regular	14 8am - KOHU Odds & Ends	15 8am - Board Meeting Debrief	16 7am - HAT/HSD Meeting @ DO	17	18
19	20	21	22 8:30am - Finance Committee	23	24	25
26	27 6:30pm - Board Special	28	29	30	31	1