

**Board of Directors**

**Regular Meeting Agenda, supplemental info**

Tuesday, September 17, 2019, 7:00pm  
Jeanne Marie Gaulke Community Meeting Room  
502 State St, Hood River  
Jean Sheppard, President  
Notes prepared by Library Director Rachael Fox

- I. Additions/deletions from the agenda (ACTION)** Sheppard
- II. Conflicts or potential conflicts of interest** Sheppard
- III. Consent Agenda (ACTION)** Sheppard
  - i. Minutes from August 20, 2019 meeting**
- IV. Open forum for the general public** Sheppard
- V. Reports**
  - i. Friends update** Fox
  - ii. Foundation update** Fox
  - iii. August 2019 financial statements** Fox
  - iv. Director's report** Fox
- VI. Old Business**
  - i. New trees** Sheppard
  - ii. Feasibility and Scoping Exercise discussion** Sheppard
- VII. New Business**
  - i. Public Records Policy (ACTION)** Sheppard
  - ii. Insurance Broker discussion** Sheppard
  - iii. Energy Trust of Oregon – Pre-Bid Project Estimate** Sheppard
  - iv. Executive session** Sheppard  
Executive Session per ORS 192.660(2)(f): To consider information or records that are exempt by law from public inspection under ORS 192.345(1). Executive session materials will be sent separately.
- VIII. Agenda items for the next meeting** Sheppard
- IX. Adjournment** Sheppard

---

Other matters may be discussed as deemed appropriate by the Board. If necessary, Executive Session may be held in accordance with the following. Bolded topics are scheduled for the current meeting's executive session.

- ORS 192.660 (1) (d) Labor Negotiations
- ORS 192.660 (1) (e) Property
- ORS 192.660 (1) (h) Legal Rights**
- ORS 192.660 (1) (i) Personnel

The Board of Directors meets on the 3rd Tuesday each month from 7:00 to 9:00pm in the Jeanne Marie Gaulke Memorial Meeting Room at 502 State Street, Hood River, Oregon. Sign language interpretation for the hearing impaired is available if at least 48 hours notice is given.

**Board of Directors**  
**Regular Meeting Agenda, supplemental info**  
Tuesday, September 17, 2019, 7:00pm  
Jeanne Marie Gaulke Community Meeting Room  
502 State St, Hood River  
Jean Sheppard, President  
Notes prepared by Library Director Rachael Fox

- I. Additions/deletions from the agenda (ACTION)** Sheppard  
**II. Conflicts or potential conflicts of interest** Sheppard  
**III. Consent Agenda (ACTION)** Sheppard

**i. Minutes from August 20, 2019 meeting**

Attachments: III.i. August 20, 2019, meeting minutes

- IV. Open forum for the general public** Sheppard

**V. Reports**

**i. Friends update** Fox

- The Friends of the Library set their annual budget. This fiscal year, they plan to donate \$8,500 for Summer Reading Performers and \$4,000 to projects.
- The Library Foundation and the Friends have been collaborating on the electronic donor recognition signage. The monitor will be installed next to the Parker room. We hope to have it up and running within the next month.
- The Friends are exploring changing the date and venue for their annual holiday party. They will explore the topic further at their October meeting.

**ii. Foundation update** Fox

- The Library Foundation discussed the proposed Feast of Words projects for 2020. Fox proposed focusing on physical improvements at the Hood River building and expanding programs and equipment in the Makerspace, and expanding the Library of Things collection. Fox will present a short list of projects and the Library Foundation will discuss them at their October meeting.
- The Library Foundation will host a donor thank you event on Monday, November 4, 5:00-6:30pm at the Hood River Library.
- The Endowment/Planned giving committee hopes to meet in late September to discuss starting a Legacy Giving Program.
- Local business Thread hosted a Writer's Workshop fundraiser for the Library Foundation on Friday, September 6. They asked people to donate money for writing assistance and then donated the proceeds to the Library Foundation.

**iii. August 2019 financial statements** Fox

Attachment: V.iii. August 2019 financial statements

The District is tracking well for this fiscal year. We currently have \$558,329 in the General Fund, \$98,310 in the Grants fund and \$95,887 in the Capital Equipment Reserve Fund.

**iv. Director's report** Fox

*Administration*

- The Gorham Babson Family Fund of the Gorge Community Foundation donated \$500 for the Parkdale Library. We will use the money to fund children's services at the branch.

- I am still working on the Pay Equity Analysis and updating all our job descriptions. I hope to have the job descriptions ready for the board to review and approve at our October meeting.

### *Facilities*

- The Oregon State Preservation Office has permitted us to install the new reader board sign directly in front of the building, but it can not be attached to the building. We will install the sign on metal posts and attach them to the concrete.
- Update generator: Hood River County Emergency Management Barb Ayers is unable to consult at this time on the generator to determine placement in the building and a cost estimate for maintenance. She will reach out to me in the near future.

### *Personnel*

- Library staff had conflict resolution training at their Friday, September 13 staff meeting. We have hired 6 Rivers Dispute Resolution Center to train staff on handling conflicts with staff and the public.

### *Statistics*

#### *FY 2018-19*

- There is 10,470 registered borrowers, 1,103 are newly registered borrowers. This is an increase of 4% over FY 2017-18.
- Annual circulation of physical and electronic items increased 1.4% over 2017-18. We circulated 147,988 items.
- There was a 1% increase in circulation of physical items over FY 2017-18. We circulated 134,419 items.
  - Adult materials 67,590
  - Young Adult materials 3,750
  - Children's materials 60,070
- Library2Go increased 17% over last year.
  - 6,894 ebooks
  - 6,675 audiobooks
- 6,345 physical items were added to the collection. This is an increase of 8% over FY 2017-18.
- 2018-19 program involvement shows a 2% increase over 2017-18. We had 24,576 people attend our programs.
- Cascade Locks Branch had 2,652 visitors, which was an increase of 51% over FY 2017-18.
- Parkdale Branch had 2,152 visitors, which was an increase of 41% patrons over FY 2017-18.

## **VI. Old Business**

### **i. New trees**

Sheppard



At the August 20, 2019 Library District Board meeting we discussed planting new trees in the area of which was occupied by the Norway Maple we recently had to remove.

I contacted Master Gardener John Stevens and he recommended planting three Himalayan Birches (*Betula utilis* var. *jaquemontii*). They have the whitest bark of all the birches. They will grow around 30 feet tall, like full sun, and will need to be irrigated the first couple of years. The best time to plant these trees is in the fall. Good News Gardening has these trees in stock and they will cost between \$69.99 for a 7' tree to \$129.99 for a 10' tree. I'd like to discuss this further at the meeting.

ii. **Feasibility and Scoping Exercise discussion** Sheppard

I have updated the Request for proposals for the Feasibility and Scoping Exercise. Based upon the feedback from three consultants, Assistant Director Arwen Ungar and I simplified the proposal, although the scope of the project remains the same.

I would like to discuss the updated proposal in detail, feedback from consultants and our options for moving forward.

**VII. New Business**

i. **Public Records Policy (ACTION)** Sheppard

Attachment: VII.i. Public Records Policy

In order to receive the 2% credit on our insurance from Special Districts Insurance Services, our district must have adopted a public records policy that includes the new changes in the law pertaining to the timeframe for responding to requests.

Our policy has been updated and approved by Special Districts legal department. There were a few other additions made based upon the recommendations by Special Districts. Please see policy in the packet for details.

I'm asking the board to approve the amended policy.

ii. **Insurance Broker discussion** Sheppard

We have used Hub International, formerly known as BCI as our insurance broker for our health care since 2011. A few years ago, BCI was purchased by Hub International. They have made gradual changes to their services. A few months ago, HUB made the decision to contract with OneDigital to take over all sales and service for a block of their existing businesses, generally employers under about 25 enrolled. We no longer work with the Hood River office and now must conduct our business with this nationwide company. I have not been happy with our service thus far.

I reached out to another special district in Hood River and they recommended an insurance broker who works with Special Districts Insurance Services, named Danny Duggan from Century Insurance Group, he is based out of Bend, Oregon. Duggan is able to provide quotes for Special Districts Insurance and other health insurance carriers.

I would propose we make a broker change to Century Insurance Group. If the board approves, I can make the necessary changes and we can pass a resolution at our October board meeting.

iii. **Energy Trust of Oregon – Pre-Bid Project estimate** Sheppard

Attachments:

- VII.iii.a. Energy Trust of Oregon, Pre-bid Project Estimates worksheet
- VII.iii.b. Energy Trust of Oregon, Technical Analysis Study

R & W Engineering firm in Portland conducted a study of our existing unit on behalf of the Energy Trust of Oregon. They determined it would be very expensive to convert our system to something that combines the heating and cooling on the roof and would be a much more time intensive project. Our current set up is the best solution at this time. Our roof top unit (RTU) works with the boiler in the basement and 14 Variable Air Units distributed throughout the building to provide set points for heating and cooling for individual areas versus trying to heat and cool the entire building at the same temperature.

R & W looked at two options:

Option 1: Replace RTU with a high efficiency Trane Voyager VAV unit which offers energy efficient savings and is one step above code. This unit is \$4,300 above an RTU at code.

Option 2: Replace RTU with a Trane Intellipak unit which is two steps above code. This unit is \$21,300 above an RTU at code.

After conducting their analysis, they determined option 2 would not be cost effective in energy saving costs and they are unable to offer an incentive.

If we chose to install option 1, they estimate we will save \$315 per year in electric cost and \$206 per year in gas costs. The unit is \$4,300 above an RTU at code. Energy Trust is able to offer an incentive of \$1,746.

Please see the Pre-Bid Project Estimate Worksheet for complete details.

I recommend we move forward with option 1. If the board approves, I will take the steps to solicit bids from contractors.

After receiving bids, I recommend we call a special meeting to approve the winning bid. Then Energy Trust of Oregon will review our contractor's proposed scope to determine compliance with Existing Building's requirements and the energy efficiency measures as described in the report. After it is determined by ICF that the project bid specification matches the studied measures, Form 120C-Incentive Application will be provided for the District to review.

If we apply for Energy Trust incentives for our project, our signed Form 120C – Incentive Application must be provided to ICF BEFORE we issue purchase orders or make other financial commitments to begin the project work.

#### **iv. Executive session**

Sheppard

Executive Session per ORS 192.660(2)(f): To consider information or records that are exempt by law from public inspection under ORS 192.345(1).

Executive session materials will be sent separately.

#### **VIII. Agenda items for the next meeting**

Sheppard

- Updated job descriptions
- Technology Use Policy
- Summer Reading Statistics
- Electronic Resources Statistics
- Quarterly Statistics

- Medical Insurance Renewal
- Staff presentation: Bilingual Outreach Specialist, Yeli Boots

## **IX. Adjournment**

Sheppard

---

Other matters may be discussed as deemed appropriate by the Board. If necessary, Executive Session may be held in accordance with the following. Bolded topics are scheduled for the current meeting's executive session.

ORS 192.660 (1) (d) Labor Negotiations

ORS 192.660 (1) (e) Property

**ORS 192.660 (1) (h) Legal Rights**

ORS 192.660 (1) (i) Personnel

The Board of Directors meets on the 3rd Tuesday each month from 7:00 to 9:00pm in the Jeanne Marie Gaulke Memorial Meeting Room at 502 State Street, Hood River, Oregon. Sign language interpretation for the hearing impaired is available if at least 48 hours notice is given.

**Board of Directors**  
**Regular Meeting Minutes**  
Tuesday, August 20, 2019, 7:00pm  
Jeanne Marie Gaulke Community Meeting Room  
502 State St, Hood River  
Jean Sheppard, President  
Minutes prepared by Library Director Rachael Fox

Present: Rachael Fox (staff), Jean Sheppard, Megan Janik, Sara Marsden, Brian Hackett.

- I. Additions/deletions from the agenda (ACTION)** Sheppard  
Board President Jean Sheppard called the meeting to order at 7:00pm. Marsden moved to approve the agenda as presented. Janik seconded. The motion carried unanimously.
- II. Conflicts or potential conflicts of interest** Sheppard  
None stated.
- III. Consent Agenda (ACTION)** Sheppard  
Sheppard asked how OCLC related to SAGE. Fox stated, OCLC provides the electronic records for each library material for our online catalog and they provide the database for Out-Of-Sage interlibrary loan. Janik moved to approve the consent agenda. Marsden seconded. The motion carried unanimously.
- IV. Open forum for the general public** Sheppard  
There was no one from the public present.
- V. Reports**
- i. Friends update** Fox  
There was nothing to add to the written report.
- ii. Foundation update** Fox  
There was nothing to add to the written report.
- iii. July 2019 financial statements** Fox  
There was nothing to add to the written report.
- iv. Director's report** Fox  
Sheppard asked when the website would be completed. Fox stated December 2019.
- Fox stated there is a strict vetting process for obtaining an ID card. Sheppard stated she is on the committee for the cards and there is a point system and it is a valid form if ID. Fox stated, they will start issuing IDs to the public in September at open enrollment events at churches and schools.
- Sheppard asked when the Norway Maple will be removed. Fox stated it will be removed in August or early September. Fox stated two companies said the tree is stable for now.
- Fox stated she would contact the board to arrange a special meeting to discuss the rooftop unit replacement after she receives the report from Energy Trust of Oregon.
- Sheppard asked about the status of the generator. Fox stated she will contact Barb Ayers to determine the maintenance costs and will report back to the board.

Fox stated Ungar is scheduled to go on leave in February.

Sheppard asked how many people attended the Unity Picnic. Fox stated over 100 people attended. Sheppard asked if less people attended this year. Fox said we had 300 people last year and we are evaluating why we had less people attend. Fox stated there were other events in the gorge the same night. Janik noted the Skamania County Fair was also that weekend.

## **VI. Old Business**

### **i. Discussion of Friends of the Library and Library Foundation liaisons** Sheppard

Sheppard, Marsden, and possibly Bureker will share being the liaisons to the Friends of the Library.

Hackett will continue being the liaison to the Library Foundation.

### **ii. New copier (ACTION)** Sheppard

Marsden approved the updated documents with the OETC contract pricing. Hackett seconded. The motion carried unanimously.

## **VII. New Business**

### **i. Exhibits policy (ACTION)** Sheppard

Janik made a motion to approve the updated policy. Hackett seconded. The motion carried unanimously.

### **ii. Air conditioning unit – library server room (ACTION)** Sheppard

Hackett made a motion to approve the proposal for the air conditioning unit for the library tech room. Janik seconded. The motion carried unanimously.

### **iii. Hood River Rotary Peace Pole (ACTION)** Sheppard

Sheppard stated she is on the committee for the Peace Pole but was not involved in the discussions with Fox. Sheppard stated to request from the committee to cover the supplies to install. Fox stated she can have our maintenance person Michael Peterson assist with installation.

Marden made a motion to approve the bid for the installation and removal of the air condition units. Janik seconded. The motion carried unanimously.

### **iv. Assistant Director position reduction in hours discussion** Sheppard

Sheppard stated we can explore it further but we need more information. The reduction would be 3-4 hours per week. Sheppard stated the position would need to still be exempt otherwise Fox would have to supervise all the employees and that does not make sense. The board discussed the possibility of job sharing, if needed. Fox stated she will explore the options further and determine how the position can be exempt and reduction in pay to match the reduction in hours. Before any changes can be made the Pay Equity Analysis must be completed and the job description updated. Fox will complete the Pay Equity Analysis in the next month or two and then will present more information for the board to discuss.

### **v. Feast of Words 2020 fundraiser discussion** Sheppard

The Library Foundation will be discussing the next Feast of Words at their September meeting. The board discussed focusing on physical improvements to the Hood River building and supporting the Makerspace and Library of Things collection.



vi. **Planting new trees**

Sheppard

Sheppard suggested contacting Master Gardener John Stevens for advice. If that does not work out, then contact Mt. Hood Gardens for consulting advice. Fox stated she will contact Stevens.

vii. **Feasibility and Scoping Exercise discussion**

Sheppard

Fox stated she will review the proposal and make changes, if needed. Fox stated Bilingual Outreach Specialist is able to assist with the project. Hackett stated we should not only change the scope because we may still run into the same issue of not having anyone bid on the project. Fox stated she will make minor adjustments, consult with colleagues and conduct research regarding the cost of this project. She will submit a new proposal to the board at the September 17, 2019 board meeting.

**VIII. Agenda items for the next meeting**

Sheppard

- Statistics FY 2018-19
- Public Records Policy
- Pay Equity and Assistant Director position

**IX. Adjournment**

Sheppard

The meeting was adjourned at 7:57pm.

---

Other matters may be discussed as deemed appropriate by the Board. If necessary, Executive Session may be held in accordance with the following. Bolded topics are scheduled for the current meeting's executive session.

- ORS 192.660 (1) (d) Labor Negotiations
- ORS 192.660 (1) (e) Property
- ORS 192.660 (1) (h) Legal Rights
- ORS 192.660 (1) (i) Personnel

The Board of Directors meets on the 3rd Tuesday each month from 7:00 to 9:00pm in the Jeanne Marie Gaulke Memorial Meeting Room at 502 State Street, Hood River, Oregon. Sign language interpretation for the hearing impaired is available if at least 48 hours notice is given.

**HOOD RIVER COUNTY  
LIBRARY DISTRICT**

**Compiled Financial Statements  
August 31, 2019**

TABLE OF CONTENTS

Independent Accountants' Compilation Report . . . . . 1

Balance Sheet – Cash Basis . . . . . 2

Statement of Revenues, Expenditures and Changes in  
Fund Balances – Cash Basis. . . . . 3

Supplementary Information:

Statement of Revenues and Expenditures – Cash Basis:

    General Fund. . . . . 4-5

    Grants Fund. . . . . 6

    Capital Equipment Reserve Fund .. . . . 7

Schedule of Revenues and Expenditures and Changes in  
Fund Balance – Cash Basis – Grants Funds. . . . . 8

**Onstott, Broehl & Cyphers, P.C.**  
Certified Public Accountants

---

KENNETH L. ONSTOTT, c.p.a.  
JAMES T. BROEHL, c.p.a.  
RICK M. CYPHERS, c.p.a.

WILLIAM S. ROOPER, c.p.a. retired

MEMBERS:  
American Institute of c.p.a.'s  
Oregon Society of c.p.a.'s

OFFICES:

100 EAST FOURTH STREET  
THE DALLES, OREGON 97058  
Telephone: (541) 296-9131  
Fax: (541) 296-6151

1313 BELMONT STREET  
HOOD RIVER, OREGON 97031  
Telephone: (541) 386-6661  
Fax: (541) 308-0178

INDEPENDENT ACCOUNTANT'S COMPILATION REPORT

Board of Directors  
Hood River County Library District  
Hood River, Oregon

Management is responsible for the accompanying financial statements of Hood River County Library District, which comprise the balance sheet – cash basis as of August 31, 2019, and the related statement of revenues, expenditures and changes in fund balance – cash basis for the two months then ended, and for determining that the cash basis of accounting is an acceptable financial reporting framework. We have performed a compilation engagement in accordance with Statements on Standards for Accounting and Review Services promulgated by the Accounting and Review Services Committee of the AICPA. We did not audit or review the financial statements nor were we required to perform any procedures to verify the accuracy or completeness of the information provided by management. Accordingly, we do not express an opinion, a conclusion, nor provide any form of assurance on these financial statements.

The financial statements are prepared in accordance with the cash basis of accounting, which is a basis of accounting other than accounting principles generally accepted in the United States of America.

Management has elected to omit substantially all of the disclosures and the statement of cash flows ordinarily included in financial statements prepared in accordance with the cash basis of accounting. If the omitted disclosures and statement of cash flows were included in the financial statements, they might influence the user's conclusions about the District's assets, liabilities, equity, revenues, and expenditures. Accordingly, the financial statements are not designed for those who are not informed about such matters.

The supplementary information contained on pages 4 through 8 is presented for purposes of additional analysis and is not a required part of the basic financial statements. The supplementary information has been compiled from information that is the representation of management. We have not audited or reviewed the supplementary information and, accordingly, do not express an opinion or provide any assurance on such supplementary information.

*Onstott, Broehl & Cyphers, P.C*  
September 10, 2019

**Hood River County Library District**  
**Balance Sheet - Cash Basis**  
**August 31, 2019**

**ASSETS**

	General Fund	Grants Fund	Capital Equipment Reserve Fund	Total
Current Assets:				
Cash in bank - Columbia State Bank	\$95,034			\$95,034
Cash with Hood River County	462,879	\$98,310	\$95,887	657,076
Petty cash	416			416
Total Current Assets	558,329	98,310	95,887	752,526
<b>TOTAL ASSETS</b>	<b>\$558,329</b>	<b>\$98,310</b>	<b>\$95,887</b>	<b>\$752,526</b>

**LIABILITIES & FUND BALANCES**

Liabilities				
Current Liabilities				
Payroll liabilities	\$114			\$114
Total Current Liabilities	114	0	0	114
Total Liabilities	114	0	0	114
Fund Balances:				
Unassigned	558,215	98,310	95,887	752,412
<b>TOTAL LIABILITIES &amp; FUND BALANCES</b>	<b>\$558,329</b>	<b>\$98,310</b>	<b>\$95,887</b>	<b>\$752,526</b>

See Independent Accountants' Compilation Report

**HOOD RIVER COUNTY LIBRARY**  
**Statement of Revenues, Expenditures, and**  
**Changes in Fund Balance - Cash Basis**  
**For the Two Months Ended August 31, 2019**

	General Fund	Grants Fund	Capital Equipment Reserve Fund	Total
<b>Revenues:</b>				
Donations and grants	\$0	\$2,794		\$2,794
Property tax revenues - current year	2,526			2,526
Property tax revenues - prior year	4,212			4,212
Fines and fees	3,507			3,507
Intergovernmental revenue	0			0
Interest revenue	3,095		\$459	3,554
Miscellaneous	0			0
<b>Total Revenues</b>	<u>13,340</u>	<u>2,794</u>	<u>459</u>	<u>16,593</u>
<b>Expenditures:</b>				
<b>Personal services:</b>				
Wages and salaries	75,844	771		76,615
Employee benefits	22,694	66		22,760
<b>Total Personal Services</b>	<u>98,538</u>	<u>837</u>	<u>0</u>	<u>99,375</u>
<b>Materials and services:</b>				
Bank charges	22			22
Building rental	3,144			3,144
Building maintenance	1,749	6,298		8,047
HVAC	1,351			1,351
Elevator	341			341
Telephone	954			954
Internet	200			200
Collection development	10,653	1,559		12,212
Technology	2,590	1,430		4,020
Accounting and auditing	0			0
Courier	394			394
Custodial services	3,646			3,646
Technical services	5,157			5,157
Library consortium	0			0
Copiers	168			168
Elections expense	0			0
Furniture and equipment	674	1,423		2,097
Insurance	0			0
Georgiana Smith Memorial Garden	3,096			3,096
Legal services	1,628			1,628
Professional services	0			0
Dues and subscriptions	327			327
Miscellaneous	1,054			1,054
Postage and freight	164			164
Printing	0			0
Programs	4,196	3,140		7,336
Advertising	339			339
Supplies - office	3,263			3,263
Travel	1,552			1,552
Training	109			109
Board development	0			0
Parking reimbursement	200			200
Electricity	3,113			3,113
Garbage	248			248
Natural gas	129			129
Water & sewer - building	849			849
<b>Total Materials and Services</b>	<u>51,310</u>	<u>13,850</u>	<u>0</u>	<u>65,160</u>
Capital outlay	0	0	802	802
<b>Total Expenditures</b>	<u>149,848</u>	<u>14,687</u>	<u>802</u>	<u>165,337</u>
<b>Revenues Over Expenditures</b>	<u>(136,508)</u>	<u>(11,893)</u>	<u>(343)</u>	<u>(148,744)</u>
<b>Other Financing Sources (Uses)</b>				
Operating transfers in	0		0	0
Operating transfers out	0			0
<b>Total Other Financing Sources (Uses)</b>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
<b>Revenues and Other Financing Sources (Uses) Over Expenditures</b>	<u>(136,508)</u>	<u>(11,893)</u>	<u>(343)</u>	<u>(148,744)</u>
Fund Balance - July 1, 2019	694,723	110,203	96,230	901,156
<b>Fund Balance - August 31, 2019</b>	<u>\$558,215</u>	<u>\$98,310</u>	<u>\$95,887</u>	<u>\$752,412</u>

See Independent Accountants' Compilation Report

**HOOD RIVER COUNTY LIBRARY DISTRICT**  
**General Fund**  
**Statement of Revenues and Expenditures - Cash Basis**  
**For the One Month and Two Months Ended**  
**August 31, 2019**

	Current Period Actual	Year to Date Actual	Annual Budget
<b>Revenues:</b>			
Tax revenues - current	\$1,139	\$2,526	\$928,493
Tax revenues - prior year	3,562	4,212	15,000
Interest revenue	1,564	3,095	12,000
Fines and fees	2,102	3,507	13,500
Intergovernmental revenue	0	0	0
Donations	0	0	0
Miscellaneous	0	0	0
<b>Total Revenues</b>	<b>8,367</b>	<b>13,340</b>	<b>968,993</b>
<b>Expenditures:</b>			
Personal services:			
Wages and salaries:			
Library clerk I	715	1,224	7,376
Library clerk II	8,680	16,531	103,314
Library assistant I	4,512	8,737	54,228
Library assistant II	8,171	16,583	100,477
Librarian I	5,569	10,680	68,801
Librarian II	4,751	9,381	58,157
Library director	6,462	12,708	77,542
Payroll taxes and benefits:			
Retirement	2,873	4,959	34,977
Social security	2,956	5,768	35,947
Workers' compensation	21	41	1,200
Health insurance	5,667	11,333	100,800
Unemployment insurance	291	593	4,229
<b>Total Personal Services</b>	<b>50,668</b>	<b>98,538</b>	<b>647,048</b>
Materials and services:			
Bank charges	6	22	250
Building rental	100	3,144	14,530
Building maintenance	75	1,749	20,000
HVAC	0	1,351	15,000
Elevator	170	341	2,350
Telephone	356	954	5,100
Internet	(227)	200	5,800
Collection development	5,520	10,653	83,000
Technology	608	2,590	13,000
Accounting and auditing	0	0	27,000
Courier	186	394	2,300

See Independent Accountants' Compilation Report

**HOOD RIVER COUNTY LIBRARY DISTRICT**  
**General Fund**  
**Statement of Revenues and Expenditures - Cash Basis**  
**For the One Month and Two Months Ended**  
**August 31, 2019**

	Current Period <u>Actual</u>	Year to Date <u>Actual</u>	Annual <u>Budget</u>
Custodial services	1,823	3,646	23,000
Technical services	5,157	5,157	4,000
Library consortium	0	0	13,070
Copiers	10	168	2,400
Elections expense	0	0	0
Furniture and equipment	514	674	4,000
Insurance	0	0	9,000
Georgiana Smith Memorial Garden	1,843	3,096	25,000
Legal services	472	1,628	4,000
Professional services	0	0	0
Dues and subscriptions	100	327	4,000
Miscellaneous	888	1,054	1,000
Postage and freight	128	164	1,200
Printing	0	0	500
Programs	2,193	4,196	20,000
Advertising	61	339	1,500
Supplies - office	1,246	3,263	14,000
Travel	1,173	1,552	5,000
Training	109	109	4,000
Board development	0	0	1,500
Parking reimbursement	200	200	1,000
Electricity	1,559	3,113	21,000
Garbage	126	248	1,600
Natural gas	129	129	10,000
Water & sewer - building	426	849	5,200
<b>Total Materials and Services</b>	<u>24,951</u>	<u>51,310</u>	<u>364,300</u>
Capital Outlay	<u>0</u>	<u>0</u>	<u>0</u>
Contingency	0	0	100,000
<b>Total Expenditures</b>	<u>75,619</u>	<u>149,848</u>	<u>1,111,348</u>
<b>Other Financing Sources (Uses)</b>			
Operating transfers In	0	0	0
Operating transfers out	0	0	(43,000)
<b>Total Other Financing Sources (Uses)</b>	<u>0</u>	<u>0</u>	<u>(43,000)</u>
<b>Change in Fund Balance</b>	<u>(\$67,252)</u>	<u>(\$136,508)</u>	<u>(\$185,355)</u>

See Independent Accountants' Compilation Report

**HOOD RIVER COUNTY LIBRARY DISTRICT**  
**Grants Fund**  
**Statement of Revenues and Expenditures - Cash Basis**  
**For the One Month and Two Months Ended**  
**August 31, 2019**

	<u>Current Period</u> <u>Actual</u>	<u>Year to Date</u> <u>Actual</u>	<u>Annual</u> <u>Budget</u>
<b>Revenues:</b>			
Donations and grants	\$2,794	\$2,794	\$340,000
Intergovernmental revenue	0	0	0
<b>Total Revenues</b>	<u>2,794</u>	<u>2,794</u>	<u>340,000</u>
<b>Expenditures:</b>			
Personal services	345	837	5,500
Materials and services:	11,350	13,850	235,000
Capital outlay	0	0	169,500
<b>Total Expenditures</b>	<u>11,695</u>	<u>14,687</u>	<u>410,000</u>
<b>Change in Fund Balance</b>	<u><u>(\$8,901)</u></u>	<u><u>(\$11,893)</u></u>	<u><u>(\$70,000)</u></u>

See Independent Accountants' Compilation Report



**HOOD RIVER COUNTY LIBRARY DISTRICT**  
**Capital Equipment Reserve Fund**  
**Statement of Revenues and Expenditures - Cash Basis**  
**For the One Month and Two Months Ended**  
**August 31, 2019**

	<u>Current Period</u> <u>Actual</u>	<u>Year to Date</u> <u>Actual</u>	<u>Annual</u> <u>Budget</u>
<b>Revenues:</b>			
Interest revenue	\$232	\$459	\$1,500
<b>Other Financing Sources</b>			
Transfer from General Fund	0	0	43,000
<b>Total Revenues and Other Sources</b>	<u>232</u>	<u>459</u>	<u>44,500</u>
<b>Expenditures:</b>			
Materials and services	0	0	0
Capital outlay	802	802	75,000
<b>Total Expenditures</b>	<u>802</u>	<u>802</u>	<u>75,000</u>
<b>Change in Fund Balance</b>	<u><u>(\$570)</u></u>	<u><u>(\$343)</u></u>	<u><u>(\$30,500)</u></u>

See Independent Accountants' Compilation Report

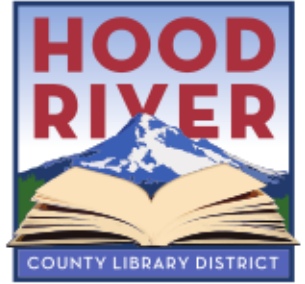
**HOOD RIVER COUNTY LIBRARY**  
**Schedule of Revenues, Expenditures, and**  
**Changes in Fund Balance - Cash Basis**  
**Grants Funds**  
**For the Two Months Ended August 31, 2019**

	Newspaper Digitization	SDAO Safety 2016	Foundation Grants	Other Grants	Friends of the Library	Parkdale Library	RTR 2018	RTR 2019	Total
<b>Revenues:</b>									
Donations and grants	\$0	\$0	\$1,694	\$0	\$600	\$500	\$0	\$0	\$2,794
Total Revenues	<u>0</u>	<u>0</u>	<u>1,694</u>	<u>0</u>	<u>600</u>	<u>500</u>	<u>0</u>	<u>0</u>	<u>2,794</u>
<b>Expenditures:</b>									
Personal services:									
Wages and salaries:									
Library clerk I					378				378
Library assistant II					393				393
Employee benefits:									
Retirement									0
FICA					59				59
Workers compensation									0
Health insurance									0
Unemployment insurance					7				7
Total Personal Services	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>837</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>837</u>
Materials and services:									
Building maintenance									6,298
Collection development			6,298		545				1,560
Technology			1,015		1,200				1,429
Programs			229		1,700		46	28	3,140
Furniture and equipment			1,366						1,423
			1,423						
Total Materials and Services	<u>0</u>	<u>0</u>	<u>10,331</u>	<u>0</u>	<u>3,445</u>	<u>0</u>	<u>46</u>	<u>28</u>	<u>13,850</u>
Capital outlay	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>
Total Expenditures	<u>0</u>	<u>0</u>	<u>10,331</u>	<u>0</u>	<u>4,282</u>	<u>0</u>	<u>46</u>	<u>28</u>	<u>14,687</u>
Net Change in Fund Balance	0	0	(8,637)	0	(3,682)	500	(46)	(28)	(11,893)
Fund Balance - July 1, 2019	825	3,000	99,732	105	5,089	0	147	1,305	110,203
Fund Balance - August 31, 2019	<u>\$825</u>	<u>\$3,000</u>	<u>\$91,095</u>	<u>\$105</u>	<u>\$1,407</u>	<u>\$500</u>	<u>\$101</u>	<u>\$1,277</u>	<u>\$98,310</u>

See Independent Accountants' Compilation Report

# **Request for proposals for Feasibility and Scoping Exercise**

## **Enhance Library Services for Odell Phase II**



*Proposals due: Monday, November 4 at 5:00pm*  
*Email: rachael@hoodriverlibrary.org*  
*Phone: 541-387-7062*

Hood River County Library District (HRCLD) seeks a qualified, experienced facilitator to help lead a feasibility and scoping exercise in the community of Odell and develop a final product.

The purpose of the exercise is to identify library needs and services desired by the Odell community, to engage library patrons and non-library users, staff and Board of Directors in the process, and to raise awareness of existing and potential library services and resources.

The ideal candidate will facilitate meetings, distilling themes and priorities from each, and will be instrumental in shaping the final document. The plan will address the implications of the proposed priorities and goals for library services in the community of Odell.

### **About the District**

HRCLD is dedicated to promoting the enjoyment of reading and culture, responding to the community's need for information, and enriching quality of life for its patrons. The library serves approximately 25,000 people, who checked out over 147,000 items in 2018-19. It includes three branches: Cascade Locks, Hood River, and Parkdale. Staff also do extensive outreach to other areas of the county, especially in Odell, a rural community of approximately 2,478 people, 67% of who are Latinx. There is a weekly Pop-Up Library in Odell. The three libraries are crucial sources of free public Internet access and electronic information, with over 6,000 Internet sessions logged in 2018-19 by residents and visitors alike on the district's computers as well as thousands of wireless internet sessions. HRCLD enjoys a very supportive Friends group, Foundation, and volunteers.

The district is a member of the Sage Library System and the Libraries of Eastern Oregon. Hood River County is in the heart of Columbia River Gorge and the Mount Hood recreational area, providing opportunity for many outdoor recreational activities including windsurfing, kiteboarding, hiking, cycling, skiing, and much more. The district has stable funding from a countywide special district that was created in 2011 following the yearlong closure of the previously county-run library system.

### **Background**

The District has a five-year strategic plan to guide priorities for 2016-2021. The Library District's Strategic Goal 1 is to create a stable and permanent presence in Odell. The sub-goal is to develop a service plan and explore collaboration with prospective partners.

We have initiated a phased approach to accomplish this goal. Phase I was to raise awareness and funds to support the pop-up library and a feasibility exercise, which will be considered Phase II. Results of Phase II will be used to inform Phase III, the development of a proposal for library services,

502 State Street  
Hood River · OR 97031  
**541 386 2535**

[www.hoodriverlibrary.org](http://www.hoodriverlibrary.org)

including identifying options for mechanisms to deliver services (e.g. permanent physical presence or other approach).

**Requirements**

HRCLD seeks a professional facilitator to:

- Oversee and guide all stages of the feasibility and scoping exercise, including meetings with stakeholders, community leaders, library staff, Board of Directors, and community members.
- Collaborate with HRCLD staff members, including Library Director, Assistant Director, and Bilingual Outreach Specialist.
- Identify and seek to engage a broad spectrum of sectors of the community, such as families with young children, young adults, older adults, business community, Spanish speakers and other public service providers to seek input regarding preferences and provisions for library services and how best to provide the services in the community of Odell.
- Effectively communicate with community members, which will require various technological and in-person approaches and use of bilingual materials.
- Ensure methods used to gather information and communicate with members of the community reflect cultural awareness of all community members.
- A draft outreach plan shall be approved by District staff and Board prior to start of public outreach.
- Mutually agreed upon milestones shall be established to monitor progress.
- Provide a written report of findings, including description of methods, participants, summary of input received and recommendation of library services for the community of Odell.

**Proposed timeline and milestones**

Initial stages of the feasibility and scoping process are expected to start in December 2019 with an expected completion in April 2020.

Task	Due Date To Be Determined
Prepare draft outreach plan	
Discuss draft outreach plan with District Staff and Board	
Complete outreach	
Complete written report	
Discuss report with District Staff and Board	

**Selection criteria**

Proposals will be evaluated by HRCLD staff, with final approval by the Board of Directors. Staff may conduct interviews via phone or streaming video. Proposals will be evaluated on the following criteria:

- Relevant experience and success in facilitation and qualitative/quantitative integration skills
- Cost to complete the process
- Prior experience working with both public and staff committees
- Demonstrable facilitation
- Creativity and ingenuity
- Bilingual (Spanish/English) desired

**Proposal requirements**

To be considered, proposals must include:

- Cover letter including a brief description of the firm or individual.
- Brief summary of the facilitator's qualifications and experience.
- Basic project plan that includes a description of the methodology, tasks, and timeline.
- Schedule of costs to complete the project.
- References and contact information for previous clients for whom comparable work was completed.
- Copy of your standard contract, if applicable.

Proposals addressing the above criteria shall be directed via the contact information below.

Rachael Fox  
Library Director  
Hood River County Library District  
502 State St.  
Hood River, OR 97031  
rachael@hoodriverlibrary.org  
541-387-7062

Proposals will be received by HRCLD until 5:00pm on Monday, November 4, 2019. Proposals received after this time will not be accepted. Please submit proposal via email as PDF files with the subject line "Proposal for Feasibility and Scoping Exercise."

# Public Records Policy



As it values transparency, Hood River County Library District fully complies with the Oregon Public Records Law, [ORS 192.410-192.505](#). Every person has a right, guaranteed by the Oregon Public Records Law, to inspect any non-exempt public record held by the District. The public may request to view District records that are not exempt per the Oregon Public Records Law and other District policies.

## Retention

The District follows the records retention schedule established for special districts by the Oregon State Archives. The District has records both electronically and in analog. However, the District prefers to retain records in digital formats using open and archival-quality standards.

## Custodian

The Library Director is the District's custodian of records and is the only party authorized to receive or comply with public records requests or inquiries from courts or law enforcement agencies.

## Requests

To best connect the requester with the records s/he seeks, requests to review records should be made in writing. Ideally, the request should include the records requested with date(s), subject matter, and any other relevant details. The request should also specify in what format the records are desired (e.g. electronic or analog). [If not available in the form requested, such records shall be made available in the form in which they are maintained. ORS 192.440\(2\).](#)

[When a request is submitted in writing, the District must respond within five business days acknowledging the receipt of the request. The District will have an additional 10 business days to fulfill the request or issue a written response estimating how long fulfillment will take. The District is not subject to this response timeframe if it is awaiting a response from the requester seeking clarification of the inquiry or if the requester has not agreed to pay for the records, provided that the cost is \\$50 or more. Other considerations that apply are:](#)

- [Complicate requests](#)
- [Large volume of requests](#)
- [Request involving documents not readily available or if the necessary staff are unavailable to fulfill the request](#)

## Access

The District aims to provide access to records by whatever method is most convenient for the requester, ideally without cost to him/her. Whenever possible, the District will supply records electronically. If electronic records are unavailable or infeasible to transmit, analog records may be viewed and copied at any of the District's branch libraries during regular public open hours. Most records are kept at the Hood River Library, so individuals wishing to view records

502 State Street  
Hood River · OR 97031

541 386 2535

[www.hoodriverlibrary.org](http://www.hoodriverlibrary.org)

at another location should state as such in their requests.

If the requester would like to review analog records, they may be viewed at any library district location. Depending on the nature of the request, the District may require the review to take place with a District representative present. Any research fees (see below) must be paid in advance. Additional fees may be charged if District staff presence is required during the review, which shall equal the rate for research fees. Original records shall not be removed from the District's locations unless authorized by the Library Director or Board of Directors.

If any person attempts to alter, remove, or destroy any District record, the District representative shall immediately terminate such person's review and notify the District's legal counsel.

## Fees

The District makes every effort to provide records without cost to the requester. However, some requests may require copying or significant amounts of staff time. In order to recover its costs for such requests, the District may charge fees associated with searching for and copying records. The Library Director may waive these fees at his/her discretion. Fees shall be limited to no more than \$50.00 unless the requester is provided with written notification of the estimated amount of the fee and the requester confirms that s/he wants the District to proceed.

Fees are as follows:

- *Paper copies or printouts*: \$0.15 per side for black and white or \$0.50 per side for color.
- *Copies of nonstandard materials (e.g. maps, videos, sounds recordings)*: Fees shall be the actual costs incurred by the District plus staff time used to them.
- *Research fees*: If a request requires District personnel to spend more than fifteen minutes searching or reviewing records prior to their review or release for copying, the fee shall be \$50.00 per hour, charged in fifteen minute increments, for any time spent over fifteen minutes. The District shall estimate the total amount of time required to respond to the records request and must be paid in advance before the search will proceed. If the actual time and costs are less than estimated, the excess money shall be refunded to the requester. If the actual time and costs are in excess of the estimated time, the difference shall be paid by the requester when the records are produced.
- *Additional charges*: If a request is of such magnitude and nature that compliance would disrupt the District's normal operation, the District may impose such additional charges as are necessary to reimburse for its actual costs of producing the records.
- *Reduced fee or free copies: Whenever it determines that furnishing copies of public records in its possession at a reduced fee or without costs would be in the public interest, the Board or Library Director may so authorize. ORS 192.440(4).*

## Restrictions

Per the District's Privacy Policy, some District records in addition to those delineated in the Oregon Public Records Law are exempt from disclosure or destroyed once they are no longer

necessary for District operations. These records include circulation records, records showing use of the District's computer networks, and other records containing personally-identifiable information about the District's patrons and their library use.

Approved by the Board of Directors, February 21, 2012

Last revised: ~~July 21, 2015~~ September 17, 2019

Last reviewed: September 17, 2019



# Pre-Bid Project Estimates Worksheet

## Existing Buildings | Form 110c

ICF is a Program Management Contractor for Energy Trust of Oregon.

Reference ID	ETECPS1541627577	PTID	P00001449531	Electric Utility	PAC	Gas Utility	NWN
--------------	------------------	------	--------------	------------------	-----	-------------	-----

This worksheet is NOT an incentive offer, application, or commitment. The EEM cost factors and potential incentive amounts identified in this worksheet are for estimating purposes only.

**NEXT STEPS:**

- Act now to request contractor bids on the EEMs you will implement. The estimates listed on this Form 110c worksheet are based on Program measures and incentives currently in effect, as well as certain other assumptions, and are valid as of the date listed only. Program requirements and incentives are subject to change without notice and to budget availability.
- Verify the bids you receive are consistent with the listed EEMs and technical analysis study specifications.
- Email, fax, mail or hand-deliver the bids, along with this Form 110c, to your Existing Buildings Program Representative for review.  
 Energy Trust of Oregon • Existing Buildings  
 615 SW Alder Street, #200 • Portland, OR 97205  
 1.866.605.1676 phone • 503.525.6150 fax  
 existingbuildings@energytrust.org
- We will review your submitted bid information and re-analyze the EEMs for cost-effectiveness and eligibility. Program changes or changes to a measure's specifications, costs or energy savings may require additional analysis, affect cost-effectiveness or otherwise disqualify a measure for Energy Trust incentives.
- If we identify custom measures that qualify for an incentive reservation offer, an authorized representative will issue a Custom Incentive Offer (Form 120C).
- Complete, sign and submit the Form 120C (by the application submittal deadline) to apply for Energy Trust incentives. Time is of the essence for incentive application submittal. Equipment purchases or other measure installation activities conducted prior to Energy Trust's receipt of a complete, signed Form 120C incentive application are done at-risk and can negatively impact a project's eligibility for incentives.

### PROJECT INFORMATION – CUSTOM MEASURES

Legal Name	Hood River County Library District	Project Name:	Hood River County Library - RTU	Prepared By:	B. Hough	Valid as of:	9/11/2019				
ENERGY EFFICIENCY MEASURES		ESTIMATED COST FACTORS									
EEM Number	Existing Condition	Energy Efficiency Measure	Estimated kWh Savings	Estimated Electric Cost Savings	Estimated Thermes Saved	Estimated Gas Cost Savings	Estimated Non Energy Cost Savings	Estimated Measure Cost	Estimated Incentive*	Estimated Payback w/incentive	Cost-Effectiveness Test Result
1	Modified baseline condition is the 50-ton TRANE Voyager standard efficiency unit. This unit supplies 20,000 CFM and has a rated EER of 10.3. It has a 20-hp supply fan and a 10-hp return fan, both variable speed.	New high efficiency 50-ton TRANE Voyager VAV unit. The proposed unit has a rated EER of 10.4 and supplies 20,000 CFM of air. The supply fan is 20-hp and the return fan is 10-hp, both variable speed. CO2 sensors (DCV). Setpoints: 69/74°F; Economizer: Yes; Critical zone pressure reset: Yes; Supply air reset: Yes (ΔT-10°F). *Mutually Exclusive with EEM-2.*	4,212	\$315	273.0	\$206		\$4,300	\$1,746	4.9	PASS
2	Modified baseline condition is the 50-ton TRANE Voyager standard efficiency unit. This unit supplies 20,000 CFM and has a rated EER of 10.3. It has a 20-hp supply fan and a 10-hp return fan, both variable speed.	New TRANE IntelliPak unit with variable speed eFlex compressors. The proposed unit has a rated EER of 10.8 and supplies 20,000 CFM of air. The supply fan is 20-hp and the return fan is 10-hp, both variable speed. CO2 sensors (DCV). Setpoints: 69/74°F; Economizer: Yes; Critical zone pressure reset: Yes; Supply air reset: Yes (ΔT-10°F). *Mutually Exclusive with EEM-1.*	9,296	\$695	273.0	\$206		\$21,300		23.6	FAIL
3		**EEM-1 is Mutually Exclusive from EEM-2 and EEM-2 is Mutually Exclusive with EEM-1.**									
			TOTAL	\$1,010	546.0	\$412		\$25,600	\$1,746	16.8	



---

# TECHNICAL ANALYSIS STUDY

---

HOOD RIVER LIBRARY  
502 STATE ST  
HOOD RIVER, OR 97031  
PROJECT: ETECP51541627577



SPONSORED BY:

ENERGY TRUST OF OREGON  
EXISTING BUILDING PROGRAM

ELECTRIC UTILITY: PACIFIC POWER  
GAS UTILITY: NORTHWEST NATURAL

SUBMITTED BY:  
R&W ENGINEERING, INC.

9/10/19  
VERSION #2

## CONTACTS

### SITE CONTACT

The following facility personnel assisted with this report:

Rachael Fox  
Library Director  
502 State St  
Hood River, OR 97031  
Phone: (503) 387-7062  
[rachael@hoodriverlibrary.org](mailto:rachael@hoodriverlibrary.org)

### ENERGY TRUST CONTACT

Nikki Burton  
ICF  
615 SW Alder Street, Suite 200  
Portland, OR 97205  
Phone: (503) 525-6140

### ATAC CONTACT INFORMATION

The Allied Technical Assistance Contractor (ATAC) that prepared this report is:

Mark D. Jones, P.E., LEED AP, CCP  
R&W Engineering, Inc.  
9615 SW Allen Blvd., Suite 107  
Beaverton, OR 97005  
Phone: (503) 292-6000  
[mjones@rweng.com](mailto:mjones@rweng.com)

## DISCLAIMER

*In no event will Energy Trust of Oregon, Inc. or ATAC be liable for (i) the failure of the customer to achieve the estimated energy savings or any other estimated benefits included herein, or (ii) for any damages to customer's site, including but not limited to any incidental or consequential damages of any kind, in connection with this report or the installation of any identified energy efficiency measures. The intent of this energy analysis study is to estimate energy savings associated with recommended energy efficiency upgrades. This report is not intended to serve as a detailed engineering design document, any description of proposed improvements that may be diagrammatic in nature are for the purpose of documenting the basis of cost and savings estimates for potential energy efficiency measures only. Detailed design efforts may be required by participant in order to implement potential measures reviewed as part of this energy analysis. While the recommendations in this report have been reviewed for technical accuracy and are believed to be reasonably accurate, all findings listed are estimates only, as actual savings and incentives may vary based on final installed measures and costs, actual operating hours, energy rates and usage.*

## NEXT STEPS FOR THE PARTICIPANT

### APPLY FOR ENERGY TRUST INCENTIVES

**Make an implementation decision:** *Please evaluate the information contained in this report and any potential measures and incentives listed in the Form 110C – Project Detail and Incentive Estimates (produced by ICF). Have your contractors bid for the measures(s) you wish to implement and send ICF a copy of the final bid. ICF will review your contractor's proposed scope to determine compliance with Existing Building's requirements and the energy efficiency measures as described in this report. After it is determined by ICF that the project bid specification match the studied measures, Form 120C-Incentive Application will be provided for you to review. If you apply for Energy Trust incentives for you project, your signed Form 120C – Incentive Application must be provided to ICF **BEFORE** you issue purchase orders or make other financial commitments to begin the project work.*

**Upon Completion of the Project:** *ICF must be notified once the project is completed in order to arrange a post-installation verification for projects that receive incentives greater than \$5,000. The program must receive all required documentation and perform any required post installation verifications before incentives can be issued.*

### APPLY FOR ENERGY TRUST SOLAR INCENTIVES

**Make a solar implementation decision:** *Please evaluate the solar site evaluation (SSE), if included in this report. Your PMC will arrange a meeting to discuss the results of the evaluation. Or, if you wish to move forward, your PMC will provide you with a list of qualified Trade Ally contractors. Obtain bids on the solar measures you want to implement. When you've selected a solar Trade Ally contractor for the installation, the Trade Ally will provide and submit the necessary incentive application paperwork to Energy Trust on your behalf. The PMC and Energy Trust's solar staff are available to answer all your solar questions.*

**Upon Completion of the Solar Project:** *The solar Trade Ally will arrange for the final Energy Trust verifications, and within 30 days of a successful verification you'll receive your solar incentive check from Energy Trust.*

## EXECUTIVE SUMMARY

This report documents energy efficiency upgrades for the Hood River Library building which is located at 502 State St. It is a two-story building with a total floor area of approximately 18,854 square feet. The library is in operation year-round for six days a week. The building was originally constructed in 1918, there was a major addition and remodel of original building completed in 2004. Using utility data from the last three years, the building's average energy use is 168,467 kWh and 6,530 therms, which gives the building an overall EUI of 65.1 kBtu/sf/yr. Table 1 below lists the energy efficiency recommendations for the library., the two measures are mutually exclusive. EEM 1 is expected to reduce the building's gas consumption by 4% and reduce electricity consumption by 2.5%. EEM 2 is expected to reduce the building's gas consumption by 4% and reduce electricity consumption by 5.5%.

## ENERGY EFFICIENCY MEASURE SUMMARY

1. **EEM 1: Upgrade rooftop unit to a high efficiency TRANE Voyager**
2. **EEM 2: Upgrade rooftop unit to a high efficiency TRANE Intellipak**

TABLE 1: EEM SUMMARY TABLE (ANNUAL)

MEASURE	ELECTRIC SAVINGS (kWh)	GAS SAVINGS (THERMS)	ENERGY COST SAVINGS *	NON-ENERGY BENEFITS **	INSTALLATION COST	SIMPLE PAYBACK ***	RETURN ON INVESTMENT (ROI) ****
EEM #1	4,212	273	\$522	\$0	\$4,300	8.2	12.1%
EEM #2	9,296	273	\$903	\$0	\$21,300	23.6	4.2%

### NOTES:

- \* Cost savings are based on Energy Trust average utility rates of \$0.075/kWh and \$0.755/therm for Oregon and \$0.7353/therm for Washington in payback calculations. Actual participant rates may be different.
- \*\* Non-energy cost benefits are from items such as avoided maintenance, reduced water costs, or other cost savings.
- \*\*\* Simple Payback is a measure of how quickly your investment in the measure will pay for itself.
- \*\*\*\* Simple ROI is another measure of measure's benefits. This is simply the inverse of the Simple Payback and can be used as a rough comparison to other investment opportunities.
- \*\*\*\*\* EEM 1 is mutually exclusive with EEM 2 and EEM 2 is mutually exclusive with EEM 1.

HISTORICAL ENERGY USE

TABLE 2A: HISTORICAL BUILDING ENERGY USE

	Electric Use (kWh)					Natural Gas Use (Therm)				
	2016	2017	2018	2019	3 Year Average	2016	2017	2018	2019	3 Year Average
Jan		13,760	13,280	12,640	13,227		1,173	773	1,095	1,014
Feb		13,520	14,320	14,240	14,027		858	874	1,269	1,000
Mar		12,800	9,760	12,480	11,680		646	557	557	587
Apr		13,120	11,600	12,080	12,267		416	244	252	304
May	11,840	15,840	12,160		13,280		243	124	142	170
Jun	11,200	17,040	13,600		13,947		150	56		103
Jul	14,960	17,680			16,320		113	32		73
Aug	15,600	21,600			18,600		244	87		166
Sep	15,600	16,720	14,000		15,440	33	343	257		211
Oct	13,040	12,640	10,560		12,080	460	471	456		462
Nov	14,160	12,960	12,800		13,307	1,186	853	1,093		1,044
Dec	15,760	14,480	12,640		14,293	1,751	1,347	1,095		1,398
<b>Total</b>	<b>112,160</b>	<b>182,160</b>	<b>124,720</b>	<b>51,440</b>	<b>168,467</b>	<b>3,430</b>	<b>6,857</b>	<b>5,648</b>	<b>3,315</b>	<b>6,530</b>
<b>Total (kBtu)</b>	<b>382,706</b>	<b>621,556</b>	<b>425,562</b>	<b>175,521</b>	<b>574,832</b>	<b>343,000</b>	<b>685,700</b>	<b>564,800</b>	<b>331,500</b>	<b>653,033</b>
<b>Total Energy Use (kBtu)</b>	<b>1,227,866</b>									
<b>Energy Use Index (KBTU/SF/YR)</b>	<b>65.1</b>									

NOTE: Based on utility bills for the last 34 months, the EUI for this building is 19% lower than a typical education building in the Northwest. See Table 2B below.

TABLE 2B: COMMERCIAL DELIVERED ENERGY CONSUMPTION INTENSITIES

	Healthcare	Food Sales	Lodging	Office	Retail	Education	Religious	Warehouse	Other
Average (kBtu/SF)	135.7	198.3	88.1	88	86.4	80.6	43.3	33.3	125.3
*Data from 2010 Buildings Energy Data Book, Table 3.1.9 (national CBECs data)									

## FACILITY OVERVIEW

### FACILITY DESCRIPTION

The Hood River Library building is located at 502 State St in Hood River, OR. It was originally constructed in 1913. The building is two stories and functions as a public library. The library is operation Monday thru Saturday year round, occupancy is generally higher during the winter months. There was a major addition, remodel and reroof of the existing building in 2004. The total building area is approximately 18,854 square feet. The first and second floor are approximately equal in floor area. There is a 50-ton variable volume rooftop HVAC which supplies air via terminal units to the majority of the building. The rooftop unit provides dx cooling. Heating is provided by hot water reheat coils at the terminal units. The hot water loop is served by a natural gas boiler. HVAC is controlled by a Niagara DDC system.

### BUILDING SHELL

The library has two types of brick exterior walls. The original building (1918 construction) has an estimated 8" hollow brick construction (U-0.469). The 2004 addition has exterior brick walls with interior insulation (U-0.13), the estimated U-factor is the maximum value allowed by code at time of construction. There was a reroof of the original building completed during the 2004 remodel. The roof of the library is estimated to have the maximum allowable U-value allowed by code at time of construction (U-0.05). Windows in the original building are clear single pane (U-0.95, SC-0.95). The windows in the 2004 addition are double pane clear, (U-0.6, SC-0.82). Interior shading devices were not found to be in use. The building is considered to have average tightness.

### INTERNAL LOADS

People: The library is open Tuesday thru Thursday from 10 am to 7 pm and Friday thru Saturday from 10 am to 6 pm. Average occupancy is between 50-100 people. The library is unoccupied on Sundays, and on Mondays has minimal occupancy of about two staff from 7 am to 6:15 pm. Occupancy can reach 300 people about 10 times throughout the year when the library hosts group events. Tuesdays and Thursdays are typically the busiest days all year, and Wednesday are busier in the summer months. The winter months are typically busier than summer months.

Lighting: Interior lighting is mostly fluorescent fixtures which are controlled manually. Interior lighting power density is estimated to be 0.8-W/sf. There are some non-LED exterior lighting fixtures which are controlled by a timer.

Miscellaneous: No unusually high equipment loads are present, so a standard education load of 0.22 W/sf is assumed.

### WATER SIDE HVAC SYSTEM

There is a Weil McLain Series 78 non-condensing natural gas boiler located in the boiler room below the first floor. It has a heating capacity of 641-MBH and is 80% efficient. The boiler has a 1/3-hp burner motor and two ¾-hp hot water primary pumps. The boiler supplies 180°F water to the hot water loop which serve reheat coils on all terminal units.



## AIR SIDE HVAC SYSTEM

There is a 50-ton cooling only (dx cooling) TRANE Voyager (AHU-1) rooftop unit serving the library. AHU-1 is a variable volume system and it supplies cooled air to interior zones via terminal units. It has a 20-hp variable speed supply fan and a 7.5-hp variable speed return fan.

There are 14 total terminal units in the library, all with hot water heating coils. Two of the terminal units are fan powered (FPTU-1 & 2). FPTU-1 serves the second-floor corridor and study room, it has a 19-MBH heating coil and a ¼-hp fan. FPTU-2 serves the young adult and reading room areas on the second floor, it has a 62-MBH heating coil and a ¾-hp fan. The other 12 terminal units have heating coils ranging between 13 and 94-MBH and supply between 300 and 2,150-CFM of conditioned air.

There are two 3-ton Mitsubishi min-split air conditioning units (AC-1 & 2), they have an efficiency of 1.4-kW/ton. AC-1 serves the second-floor story cave. AC-2 serves the computer room and story cave on the first floor.

There is an electric wall heater serving the staircase in the southeast corner of the building. It has a 2-kW heating capacity and supplies 100-CFM.

There are three exhaust fans in the building (EF-1 thru 3) which exhaust 800, 200 and 100-CFM, respectively.

## CONTROLS

There is a Niagara DDC system which controls the buildings HVAC and boiler systems. Typical occupied heating/cooling setpoints are 69/72 °F throughout the building. Unoccupied heating/cooling setpoints are 55/85 °F. The HVAC systems are set to be in occupied mode from 7 am to 6:15 pm on Mondays, Fridays and Saturdays, and from 7 am to 7:15 pm Tuesday thru Thursday. HVAC is off on Sundays. Ventilation throughout the building is estimated to be 20% of supply air, which is slightly above current code minimum requirements. There are no CO2 sensors currently installed for demand control ventilation.

## OTHER BUILDING ENERGY EQUIPMENT

Elevator equipment.

## SOLAR OPPORTUNITIES

Facility staff has indicated that they are not interested in being contacted regarding solar opportunities.

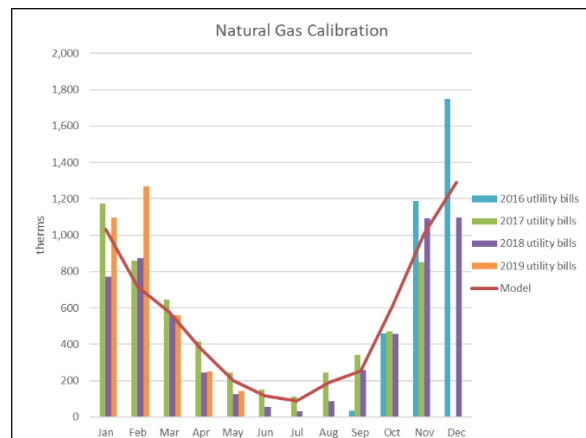
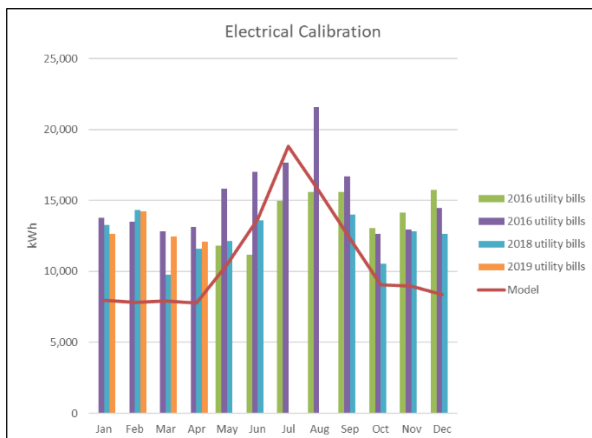
MODEL CALIBRATION

TABLE 3: BILLED/BASELINE VERSUS MODELED ENERGY USE

	Electric Use (kWh)			Natural Gas Use (Therm)		
	Baseline	Model	% Deviation	Baseline	Model	% Deviation
Jan	13,227	7,963	-39.8%	1,014	1,031	1.7%
Feb	14,027	7,847	-44.1%	1,000	718	-28.2%
Mar	11,680	7,902	-32.3%	587	577	-1.6%
Apr	12,267	7,763	-36.7%	304	376	23.7%
May	13,280	10,461	-21.2%	170	199	17.3%
Jun	13,947	13,697	-1.8%	103	118	14.6%
Jul	16,320	18,838	15.4%	73	89	22.8%
Aug	18,600	15,608	-16.1%	166	189	14.2%
Sep	15,440	12,356	-20.0%	211	254	20.4%
Oct	12,080	9,041	-25.2%	462	608	31.5%
Nov	13,307	8,958	-32.7%	1,044	1,009	-3.4%
Dec	14,293	8,380	-41.4%	1,398	1,289	-7.8%
Total	168,467	128,814	-23.5%	6,530	6,457	-1.1%

EXPLANATION:

The baseline model should be considered accurate. The HVAC loads including fans and plants, and interior lighting are included in the model. Differences between the model and utility bills are due to non-modeled energy uses including domestic hot water, exterior lighting, computer equipment and plug loads, and elevator equipment. HVAC equipment schedules were modeled as being in occupied mode 7 am – 7 pm on weekdays, 7 am – 6 pm on Saturdays and off on Sundays. The modeled weekday schedule is an average of the actual programmed schedule over five weekdays. Modeled weekend schedules match actual programmed schedules. Modeled people occupancy was decreased slightly in summer months to account for the fact that the winter months are generally busier.



## DETAILED DESCRIPTION OF PROPOSED MEASURES

### EEM 1 – HIGH EFFICIENCY ROOFTOP UNIT

#### BASELINE CONDITION

There is a 50-ton cooling only (dx cooling) TRANE Voyager (AHU-1) rooftop unit serving the library, it was installed in 2004. AHU-1 is a variable volume system and it supplies cooled air to interior zones via terminal units. It has a 20-hp variable speed supply fan and a 7.5-hp variable speed return fan.

There are 14 total terminal units in the library, all with hot water heating coils. Two of the terminal units are fan powered (FPTU-1 & 2). FPTU-1 serves the second-floor corridor and study room, it has a 19-MBH heating coil and a ¼-hp fan. FPTU-2 serves and the young adult and reading room areas on the second floor, it has a 62-MBH heating coil and a ¾-hp fan. The other 12 terminal units have heating coils ranging between 13 and 94-MBH and supply between 300 and 2,150-CFM of conditioned air.

#### MODIFIED BASELINE CONDITION

Since the existing equipment is past its useful lifetime, only energy savings resulting from new equipment exceeding current minimum code efficiencies will be eligible for incentive funds. Savings calculations for this measure were calculated by comparing the proposed condition (described below) to a modified baseline condition. The modified baseline condition uses code minimum efficiencies for AHU-1, and code minimum ventilation requirements, therefore any savings resulting from improvements beyond code minimums will be reflected.

The equipment selection for this modified baseline condition is the 50-ton TRANE Voyager standard efficiency unit. This unit supplies 20,000 CFM and has a rated EER of 10.3. It has a 20-hp supply fan and a 10-hp return fan, both variable speed. See appendix for additional equipment details.

This condition includes the addition of supply air temperature reset. Oregon Energy Efficiency code requires that supply air temperature is reset by a minimum of 35% of the difference between the design supply-air temperature (55°F) and the design air temperature (74°F). This results in a supply air temperature reset of 6.65°F. Oregon Energy Code also requires that the static pressure set point be reset based on the zone requiring most pressure (“critical zone reset”), this is included in the modified baseline condition as well. Heating and cooling setpoints for this condition are 69/74 °F, in order to meet code requirement of a 5 °F minimum deadband.

**PROPOSED CONDITION**

This measure proposes upgrading the rooftop unit to a new high efficiency 50-ton TRANE Voyager VAV unit. The proposed unit has a rated EER of 10.4 and supplies 20,000 CFM of air. The supply fan is 20-hp and the return fan is 10-hp, both variable speed. CO<sub>2</sub> sensors will be added in the return duct to allow for demand controlled ventilation, which will allow ventilation amounts to be slightly lowered as allowed by code. A supply air temperature reset of 10°F is included in this condition. Critical zone reset is also included in this proposed condition. See appendix for addition equipment details. Heating and cooling setpoints for this condition are 69/74 °F, in order to meet code requirement of a 5 °F minimum deadband.

**NON-ENERGY SAVINGS DESCRIPTION**

None.

TABLE 4: SUMMARY OF EEM 1

	kWh Savings	Therm Savings
Estimated Energy Savings	4,212	273
Age of Equipment Being Replaced	16 years	
Is Existing Equipment Currently Working or Not Working?	Working	
Cost [Specify if Incremental was used]	\$4,300 – Incremental vs modified baseline	
Notes [Include Assumptions Here]	Pricing provided by TRANE (David Strasser)	

TABLE 5: EEM 1 CONDITIONS

Item	Baseline Condition (existing)	Modified Baseline (code)	Proposed Condition
AHU-1	<p><b>Existing TRANE Voyager</b> Cooling: 50-ton, 20,000 CFM</p> <p>Full load energy rate: 1.25-kW/ton</p> <p>Supply fan: 12.8 kW VFD Return fan: 4.5 kW VFD</p> <p>Setpoints: 69/72°F</p> <p>No DCV: Code ventilation = 16% of supply</p> <p>Economizer: Yes Critical zone pressure reset: No Supply air reset: No</p>	<p><b>New Std Efficiency TRANE Voyager</b> Cooling: 50-ton, 20,000 CFM</p> <p>Full load energy rate: 1.17-kW/ton</p> <p>Supply fan: 14.74 kW VFD Return fan: 7.2 kW VFD</p> <p>Setpoints: 69/74°F</p> <p>No DCV: Code ventilation = 16% of supply</p> <p>Economizer: Yes Critical zone pressure reset: Yes Supply air reset: Yes (ΔT-6.65°F)</p>	<p><b>High Efficiency TRANE Voyager</b> Cooling: 50-ton, 20,000 CFM</p> <p>Full load energy rate: 1.11-kW/ton</p> <p>Supply fan: 14.54 kW VFD Return fan: 7.2 kW VFD</p> <p>Setpoints: 69/74°F</p> <p>DCV: Avg ventilation = 13% of supply</p> <p>Economizer: Yes Critical zone pressure reset: Yes Supply air reset: Yes (ΔT-10°F)</p>

## EEM 2 – EXTRA HIGH EFFICIENCY ROOFTOP UNIT

### BASELINE CONDITION

There is a 50-ton cooling only (dx cooling) TRANE Voyager (AHU-1) rooftop unit serving the library, it was installed in 2004. AHU-1 is a variable volume system and it supplies cooled air to interior zones via terminal units. It has a 20-hp variable speed supply fan and a 7.5-hp variable speed return fan.

There are 14 total terminal units in the library, all with hot water heating coils. Two of the terminal units are fan powered (FPTU-1 & 2). FPTU-1 serves the second-floor corridor and study room, it has a 19-MBH heating coil and a ¼-hp fan. FPTU-2 serves and the young adult and reading room areas on the second floor, it has a 62-MBH heating coil and a ¾-hp fan. The other 12 terminal units have heating coils ranging between 13 and 94-MBH and supply between 300 and 2,150-CFM of conditioned air.

### MODIFIED BASELINE CONDITION

Since the existing equipment is past its useful lifetime, only energy savings resulting from new equipment exceeding current minimum code efficiencies will be eligible for incentive funds. Savings calculations for this measure were calculated by comparing the proposed condition (described below) to a modified baseline condition. The modified baseline condition uses code minimum efficiencies for AHU-1, and code minimum ventilation requirements, therefore any savings resulting from improvements beyond code minimums will be reflected.

The equipment selection for this modified baseline condition is the 50-ton TRANE Voyager standard efficiency unit. This unit supplies 20,000 CFM and has a rated EER of 10.3. It has a 20-hp supply fan and a 10-hp return fan, both variable speed. See appendix for additional equipment details.

This condition includes the addition of supply air temperature reset. Oregon Energy Efficiency code requires that supply air temperature is reset by a minimum of 35% of the difference between the design supply-air temperature (55°F) and the design air temperature (74°F). This results in a supply air temperature reset of 6.65°F. Oregon Energy Code also requires that the static pressure set point be reset based on the zone requiring most pressure (“critical zone reset”), this is included in the modified baseline condition as well. Heating and cooling setpoints for this condition are 69/74 °F, in order to meet code requirement of a 5 °F minimum deadband.

### PROPOSED CONDITION

This measure proposes upgrading the 50-ton rooftop unit to a new TRANE Intellipak unit with variable speed eFlex compressors. The proposed equipment has a rated EER of 10.8. The supply fan is 20-hp and the return fan is 10-hp, both variable speed. The proposed unit achieves high efficiency cooling performance via variable speed compressors allowing for improved part load efficiencies. CO<sub>2</sub> sensors will be added in the return duct to allow for demand-controlled ventilation, which will allow ventilation amounts to be slightly lowered as allowed by code. A supply air temperature reset of 10°F is included in this condition. Critical zone reset is also included in this proposed condition. See appendix for addition equipment details. Heating and cooling setpoints for this condition are 69/74 °F, in order to meet code requirement of a 5 °F minimum deadband.

NON-ENERGY SAVINGS DESCRIPTION

None.

TABLE 6: SUMMARY OF EEM 2

	kWh Savings	Therm Savings
Estimated Energy Savings	9,296	273
Age of Equipment Being Replaced	16 years	
Is Existing Equipment Currently Working or Not Working?	Working	
Cost [Specify if Incremental was used]	\$21,300 – Incremental vs modified baseline	
Notes [Include Assumptions Here]	Pricing provided by TRANE (David Strasser)	

TABLE 7: EEM 2 CONDITIONS

Item	Baseline Condition (existing)	Modified Baseline (code)	Proposed Condition
AHU-1	<p><b>Existing TRANE Voyager</b> Cooling: 50-ton, 20,000 CFM</p> <p>Full load energy rate: 1.25-kW/ton</p> <p>Supply fan: 12.8 kW VFD Return fan: 4.5 kW VFD</p> <p>Setpoints: 69/72°F</p> <p>No DCV: Code ventilation = 16% of supply</p> <p>Economizer: Yes Critical zone pressure reset: No Supply air reset: No</p>	<p><b>New Std Efficiency TRANE Voyager</b> Cooling: 50-ton, 20,000 CFM</p> <p>Full load energy rate: 1.17-kW/ton</p> <p>Supply fan: 14.74 kW VFD Return fan: 7.2 kW VFD</p> <p>Setpoints: 69/74°F</p> <p>No DCV: Code ventilation = 16% of supply</p> <p>Economizer: Yes Critical zone pressure reset: Yes Supply air reset: Yes (ΔT-6.65°F)</p>	<p><b>TRANE Intellipak Inverter Compressors</b> Cooling: 50-ton, 20,000 CFM</p> <p>Full load energy rate: 0.98-kW/ton</p> <p>Supply fan: 14.37 kW VFD Return fan: 7.2 kW VFD</p> <p>Setpoints: 69/74°F</p> <p>DCV: Avg ventilation = 13% of supply</p> <p>Economizer: Yes Critical zone pressure reset: Yes Supply air reset: Yes (ΔT-10°F)</p>

APPENDIX A –BASELINE (EXISTING CONDITIONS):

Baseline Energy Consumption

**MONTHLY ENERGY CONSUMPTION**  
By SCI

----- Monthly Energy Consumption -----

Utility	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total	
<b>Alternative: 1 Hood River Library</b>														
<b>Electric</b>														
On-Pk Cons. (kWh)	7,963	7,847	7,902	7,763	10,461	13,697	18,838	15,608	12,356	9,041	8,958	8,380	128,812	
On-Pk Demand (kW)	39	44	53	67	112	127	133	134	122	81	47	39	134	
<b>Gas</b>														
On-Pk Cons. (therms)	1,031	718	577	376	199	118	89	189	254	608	1,009	1,289	6,457	
On-Pk Demand (therms/hr)	5	6	6	6	4	3	3	3	4	7	8	8	8	
<hr/>														
<u>Energy Consumption</u>						<u>Environmental Impact Analysis</u>								
Building	57,565	Btu/(ft2-year)										CO2	No Data Available	
Source	106,010	Btu/(ft2-year)										SO2	No Data Available	
												NOX	No Data Available	
Floor Area	18,854	ft2												

Project Name:  
Dataset Name: HOOD RIVER LIB.TRC

TRACE® 700 v6.3.4 calculated at 08:30 AM on 09/05/2019  
Alternative - 1 Monthly Energy Consumption report Page 1 of 4

Baseline Energy Summary

<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>ENERGY CONSUMPTION SUMMARY</b>                      By SCI                 </div>					
	Elect Cons. (kWh)	Gas Cons. (kBtu)	% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
<b>Alternative 1</b>					
<b>Primary heating</b>					
Primary heating	149	645,693	59.5 %	646,202	681,203
Other Htg Accessories	4,294		1.4 %	14,656	43,972
<b>Heating Subtotal</b>	<b>4,443</b>	<b>645,693</b>	<b>60.9 %</b>	<b>660,858</b>	<b>725,175</b>
<b>Primary cooling</b>					
Cooling Compressor	61,781		19.4 %	210,859	632,642
Tower/Cond Fans			0.0 %	0	0
Condenser Pump			0.0 %	0	0
Other Clg Accessories	577		0.2 %	1,971	5,913
<b>Cooling Subtotal....</b>	<b>62,359</b>		<b>19.6 %</b>	<b>212,830</b>	<b>638,555</b>
<b>Auxiliary</b>					
Supply Fans	24,695		7.8 %	84,284	252,877
Pumps	6,312		2.0 %	21,543	64,636
Stand-alone Base Utilities	5,256		1.7 %	17,939	53,822
<b>Aux Subtotal....</b>	<b>36,263</b>		<b>11.4 %</b>	<b>123,766</b>	<b>371,335</b>
<b>Lighting</b>					
Lighting	25,747		8.1 %	87,875	263,650
<b>Receptacle</b>					
Receptacles			0.0 %	0	0
<b>Cogeneration</b>					
Cogeneration			0.0 %	0	0
<b>Totals</b>					
<b>Totals**</b>	<b>128,812</b>	<b>645,693</b>	<b>100.0 %</b>	<b>1,085,328</b>	<b>1,998,715</b>
<p>* Note: Resource Utilization factors are included in the Total Source Energy value .                      ** Note: This report can display a maximum of 7 utilities . If additional utilities are used , they will be included in the total .</p>					
Project Name: Dataset Name: HOOD RIVER LIB.TRC			TRACE® 700 v6.3.4 calculated at 08:30 AM on 09/05/2019 Alternative - 1 Energy Consumption Summary report page 1		



APPENDIX B – MODIFIED BASELINE

Modified Baseline Energy Consumption

**MONTHLY ENERGY CONSUMPTION**  
By SCI

----- Monthly Energy Consumption -----

Utility	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
<b>Alternative: 2 ModBas</b>													
<b>Electric</b>													
On-Pk Cons. (kWh)	6,112	6,283	6,018	6,103	8,432	11,153	15,646	12,530	9,884	7,031	7,387	6,246	102,825
On-Pk Demand (kW)	34	38	47	54	91	119	127	128	113	66	40	34	128
<b>Gas</b>													
On-Pk Cons. (therms)	866	573	433	274	135	77	60	142	200	467	851	1,134	5,212
On-Pk Demand (therms/hr)	5	5	5	6	3	2	2	3	3	6	8	8	8
<hr/>													
<u>Energy Consumption</u>				<u>Environmental Impact Analysis</u>									
Building	46,260 Btu/(ft2-year)			CO2 No Data Available									
Source	84,948 Btu/(ft2-year)			SO2 No Data Available									
				NOX No Data Available									
Floor Area	18,854 ft2												

Project Name:  
Dataset Name: HOOD RIVER LIB.TRC

TRACE® 700 v6.3.4 calculated at 01:41 PM on 09/10/2019  
Alternative - 2 Monthly Energy Consumption report Page 2 of 4

Modified Baseline Energy Summary

<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>ENERGY CONSUMPTION SUMMARY</b>                      By SCI                 </div>					
	Elect Cons. (kWh)	Gas Cons. (kBtu)	% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
<b>Alternative 2</b>					
<b>Primary heating</b>					
Primary heating	149	521,243	59.8 %	521,752	550,203
Other Htg Accessories	3,781		1.5 %	12,903	38,714
<b>Heating Subtotal</b>	<b>3,930</b>	<b>521,243</b>	<b>61.3 %</b>	<b>534,655</b>	<b>588,917</b>
<b>Primary cooling</b>					
Cooling Compressor	47,276		18.5 %	161,352	484,105
Tower/Cond Fans			0.0 %	0	0
Condenser Pump			0.0 %	0	0
Other Clg Accessories	494		0.2 %	1,685	5,054
<b>Cooling Subtotal....</b>	<b>47,769</b>		<b>18.7 %</b>	<b>163,037</b>	<b>489,160</b>
<b>Auxiliary</b>					
Supply Fans	14,420		5.6 %	49,215	147,660
Pumps	5,704		2.2 %	19,466	58,404
Stand-alone Base Utilities	5,256		2.1 %	17,939	53,822
<b>Aux Subtotal....</b>	<b>25,379</b>		<b>9.9 %</b>	<b>86,620</b>	<b>259,885</b>
<b>Lighting</b>					
Lighting	25,747		10.1 %	87,875	263,650
<b>Receptacle</b>					
Receptacles			0.0 %	0	0
<b>Cogeneration</b>					
Cogeneration			0.0 %	0	0
<b>Totals</b>					
<b>Totals**</b>	<b>102,825</b>	<b>521,243</b>	<b>100.0 %</b>	<b>872,186</b>	<b>1,601,612</b>
<p>* Note: Resource Utilization factors are included in the Total Source Energy value .                      ** Note: This report can display a maximum of 7 utilities . If additional utilities are used , they will be included in the total .</p>					
Project Name: Dataset Name: HOOD RIVER LIB.TRC			TRACE® 700 v6.3.4 calculated at 08:30 AM on 09/05/2019 Alternative - 2 Energy Consumption Summary report page 1		

Modified Baseline Equipment Details

27 1/2-50 Ton Packaged Commercial Rooftop



Unit Information

Tag	Voy Std
Quantity	1
Model number	YCD600
Efficiency / Cond Coil	<b>Standard efficiency unit</b>
Options	
Development Sequence	<b>R410A Refrigerant</b>
Unit Function	DX Cooling, natural gas heat
Unit Airflow Design	Downflow supply and upflow return
Nominal Cooling Capacity	50 Ton
Power Supply	460/60/3
Heating Capacity	Low modulating gas 40 & 50T
Exhaust	100% PE Stat Ultra low leak exhaust damp
Filter	2" MERV 8 Throwaway filters
Actual Supply Motor BHP	18.17 bhp
Supply Air Fan Drive Selections	725/604 (60/50 hz)
Fresh Air Selection	Economizer, dry bulb w/ ultra low damper
System Control	VAV (DTC)/w/ BP w/ shaft grounding
Design airflow	20000 cfm
Elevation	0.00 ft
Min operating weight	
Estimated operating weight	6112.0 lb

Cooling Information

Cooling EDB	80.00 F
Cooling EWB	67.00 F
Ambient temp	95.00 F
Leaving unit DB	61.34 F
Leaving unit WB	58.68 F
Gross total capacity	585.52 MBh
Gross sensible capacity	464.45 MBh
Gross latent capacity	121.07 MBh
Net total capacity	535.22 MBh
Net sensible capacity	414.14 MBh
Net sensible heat ratio	77.38 %
Evaporator face area	36.70 sq ft
Evaporator face velocity	545 ft/min
Leaving coil DB	58.58 F
Leaving coil WB	57.63 F

Job Information

R&W Engineers 50 T

Motor/Electrical Information

Power Supply	460/60/3
ESP	1.000 in H2O
Total static pressure	2.620 in H2O
Supply Fan Motor Hp	20 Hp
Supply Air Fan Drive Selections	725/604 (60/50 hz)
Actual Supply Motor BHP	18.17 bhp
Indoor speed	702 rpm
Supply Motor Power (kW)	14.74 kW
Outdoor motor power	4.27 kW
Compressor power	40.79 kW
System power	59.79 kW
EER @ AHRI	10.3 EER
Exhaust	100% PE Stat Ultra low leak exh
Min circuit ampacity	124.47 A
Max overcurrent protection	150.00 A
Min disconnect switch size	135.00 A
Compressor 1 RLA	23.00 A
Compressor 2 RLA	23.00 A
Compressor 3 RLA	27.50 A
Supply fan FLA	24.70 A
Condenser fan FLA	3.50 A
Condenser fan count	4.00 Each
Exhaust fan FLA	2.70 A
Exhaust fan count	2.00 Each
Electric heater FLA	0.00 A
Crankcase heater FLA	0.00 A
IEER @ AHRI	12.3 EER

Heating Information

Heating Capacity	Low modulating gas 40 & 50T
Input htg capacity	350.00 MBh
Output htg capacity	280.00 MBh
Heating EAT	70.00 F
Heating LAT	83.40 F
Heating delta T	13.40 F

Modified Baseline Cost

**RE: Rough Costs for a Voyager**  
Strasser, David

Sent: Tue 6/25/2019 4:47 PM

To: Mark Jones

CC: Burton, Nikki

Attachments: Voyager 3 Product Report.pdf (79 KB) 20-75 Ton Intellipak Product Report.pdf (50 KB)

Mark,

Attached are three selections and here are the budgets and IEER:

50 Ton std Voyager 12.3 IEER Budget \$ 53,000

50 Ton High Eff Voyager 14.5 IEER Budget \$ 57,000

50 Ton IPak with VFD Compressors 16.2 IEER Budget \$ 74,000

Thanks,

David

David Strasser

TraneOregon

Direct (503) 431-2535

Mobile (503) 602-8969

[DStrasser@Trane.com](mailto:DStrasser@Trane.com)

[www.TraneEngineer.com](http://www.TraneEngineer.com)

RE: Incremental cost for adding CO2 to Voyager or Intellipak air handler



Strasser, David <dstrasser@trane.com>

To Isaac Schultz

Reply

Reply All

Forward

Tue 9/3/2019 1:45 PM

The cost is \$300

From: Isaac Schultz <[ischultz@rweng.com](mailto:ischultz@rweng.com)>

Sent: Tuesday, September 3, 2019 1:09 PM

To: Strasser, David <[dstrasser@trane.com](mailto:dstrasser@trane.com)>

Subject: Incremental cost for adding CO2 to Voyager or Intellipak air handler

**Alert: This is an external email.**

Hi David,

Could you provide a cost for adding CO2 sensors for demand controlled ventilation onto the Voyager and/or Intellipak air handlers? This is for the Hood River library project we spoke about last week. Thank you very much for your help on this!

Best,

Isaac



**ISAAC SCHULTZ**  
MECHANICAL | ENERGY DESIGNER  
9615 SW Allen Blvd, Suite 107  
Beaverton, OR 97005  
(o) 503.292.6000 (d) 503.726.3340

*"Dedicated to Building Lasting Relationships"*

APPENDIX C – EEM 1  
EEM 1 Energy Consumption

**MONTHLY ENERGY CONSUMPTION**  
 By SCI

----- Monthly Energy Consumption -----

Utility	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
<b>Alternative: 3                      EEM 1</b>													
<b>Electric</b>													
On-Pk Cons. (kWh)	6,109	5,866	5,751	5,834	8,193	10,589	14,932	11,917	9,498	6,746	6,934	6,244	98,613
On-Pk Demand (kW)	33	37	46	53	87	114	121	121	108	64	39	33	121
<b>Gas</b>													
On-Pk Cons. (therms)	823	536	401	259	122	68	57	135	190	442	814	1,092	4,939
On-Pk Demand (therms/hr)	5	5	5	5	3	2	2	3	3	6	8	8	8
<hr/>													
<u>Energy Consumption</u>				<u>Environmental Impact Analysis</u>									
Building	44,046 Btu/(ft2-year)			CO2		No Data Available							
Source	81,132 Btu/(ft2-year)			SO2		No Data Available							
Floor Area	18,854 ft2			NOX		No Data Available							

Project Name:  
 Dataset Name: HOOD RIVER LIB.TRC

TRACE® 700 v6.3.4 calculated at 08:30 AM on 09/05/2019  
 Alternative - 3 Monthly Energy Consumption report Page 3 of 4

EEM 1 Energy Summary

<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>ENERGY CONSUMPTION SUMMARY</b>                      By SCI                 </div>					
	Elect Cons. (kWh)	Gas Cons. (kBtu)	% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
<b>Alternative 3</b>					
<b>Primary heating</b>					
Primary heating	149	493,870	59.5 %	494,379	521,389
Other Htg Accessories	3,677		1.5 %	12,549	37,652
<b>Heating Subtotal</b>	<b>3,826</b>	<b>493,870</b>	<b>61.0 %</b>	<b>506,928</b>	<b>559,041</b>
<b>Primary cooling</b>					
Cooling Compressor	43,211		17.8 %	147,479	442,481
Tower/Cond Fans			0.0 %	0	0
Condenser Pump			0.0 %	0	0
Other Clg Accessories	469		0.2 %	1,601	4,802
<b>Cooling Subtotal....</b>	<b>43,680</b>		<b>18.0 %</b>	<b>149,079</b>	<b>447,283</b>
<b>Auxiliary</b>					
Supply Fans	14,557		6.0 %	49,683	149,065
Pumps	5,547		2.3 %	18,932	56,802
Stand-alone Base Utilities	5,256		2.2 %	17,939	53,822
<b>Aux Subtotal....</b>	<b>25,360</b>		<b>10.4 %</b>	<b>86,554</b>	<b>259,689</b>
<b>Lighting</b>					
Lighting	25,747		10.6 %	87,875	263,650
<b>Receptacle</b>					
Receptacles			0.0 %	0	0
<b>Cogeneration</b>					
Cogeneration			0.0 %	0	0
<b>Totals</b>					
<b>Totals**</b>	<b>98,613</b>	<b>493,870</b>	<b>100.0 %</b>	<b>830,436</b>	<b>1,529,664</b>
<p>* Note: Resource Utilization factors are included in the Total Source Energy value .                      ** Note: This report can display a maximum of 7 utilities . If additional utilities are used , they will be included in the total .</p>					
Project Name: Dataset Name: HOOD RIVER LIB TRC			TRACE® 700 v6.3.4 calculated at 08:30 AM on 09/05/2019 Alternative - 3 Energy Consumption Summary report page 1		

EEM 1 Equipment Details

27 1/2-50 Ton Packaged Commercial Rooftop



Unit Information

Tag	Voy High
Quantity	1
Model number	YCD600
Efficiency / Cond Coil	<b>High efficiency, eStage</b>
Options	
Development Sequence	<b>R410A Refrigerant</b>
Unit Function	DX Cooling, natural gas heat
Unit Airflow Design	Downflow supply and upflow return
Nominal Cooling Capacity	50 Ton
Power Supply	460/60/3
Heating Capacity	Low modulating gas 40 & 50T
Exhaust	100% PE Stat Ultra low leak exhaust damp
Filter	2" MERV 8 Throwaway filters
Actual Supply Motor BHP	19.49 bhp
Supply Air Fan Drive Selections	675/562 (60/50 hz)
Fresh Air Selection	Economizer, dry bulb w/ ultra low damper
System Control	VAV (DTC)/w/ BP w/ shaft grounding
Design airflow	20000 cfm
Elevation	0.00 ft
Min operating weight	
Estimated operating weight	6102.0 lb

Cooling Information

Cooling EDB	80.00 F
Cooling EWB	67.00 F
Ambient temp	95.00 F
Leaving unit DB	61.01 F
Leaving unit WB	58.52 F
Gross total capacity	598.78 MBh
Gross sensible capacity	479.06 MBh
Gross latent capacity	119.69 MBh
Net total capacity	543.31 MBh
Net sensible capacity	423.61 MBh
Net sensible heat ratio	0.78 %
Evaporator face area	36.70 sq ft
Evaporator face velocity	545 ft/min
Leaving coil DB	58.36 F
Leaving coil WB	57.47 F

Job Information

R&W Engineers 50 T
--------------------

Motor/Electrical Information

Power Supply	460/60/3
ESP	1.000 in H2O
Total static pressure	2.620 in H2O
Supply Fan Motor Hp	20 Hp
Supply Air Fan Drive Selections	675/562 (60/50 hz)
Actual Supply Motor BHP	19.49 bhp
Indoor speed	700 rpm
Supply Motor Power (kW)	14.55 kW
Outdoor motor power	0.02 kW
Compressor power	40.76 kW
System power	61.59 kW
EER @ AHRI	10.4 EER
Exhaust	100% PE Stat Ultra low leak exh
Min circuit ampacity	124.57 A
Max overcurrent protection	150.00 A
Min disconnect switch size	135.00 A
Compressor 1 RLA	18.60 A
Compressor 2 RLA	27.50 A
Compressor 3 RLA	27.50 A
Supply fan FLA	24.70 A
Condenser fan FLA	3.50 A
Condenser fan count	4.00 Each
Exhaust fan FLA	2.70 A
Exhaust fan count	2.00 Each
Electric heater FLA	0.00 A
Crankcase heater FLA	0.00 A
IEER @ AHRI	14.5 EER

Heating Information

Heating Capacity	Low modulating gas 40 & 50T
Input htg capacity	350.00 MBh
Output htg capacity	280.00 MBh
Heating EAT	70.00 F
Heating LAT	83.40 F
Heating delta T	13.40 F



EEM 1 Cost

**RE: Rough Costs for a Voyager**  
Strasser, David

Sent: Tue 6/25/2019 4:47 PM

To: Mark Jones

CC: Burton, Nikki

Attachments:  Voyager 3 Product Report.pdf (79 KB)  20-75 Ton Intellipak Product Report.pdf (50 KB)

Mark,

Attached are three selections and here are the budgets and IEER:

50 Ton std Voyager 12.3 IEER Budget \$ 53,000

50 Ton High Eff Voyager 14.5 IEER Budget \$ 57,000

50 Ton IPak with VFD Compressors 16.2 IEER Budget \$ 74,000

Thanks,

David

David Strasser

TraneOregon

Direct (503) 431-2535

Mobile (503) 602-8969

[DStrasser@Trane.com](mailto:DStrasser@Trane.com)

[www.TraneEngineer.com](http://www.TraneEngineer.com)

RE: Incremental cost for adding CO2 to Voyager or Intellipak air handler



Strasser, David <dstrasser@trane.com>

To Isaac Schultz

 Reply

 Reply All

 Forward



Tue 9/3/2019 1:45 PM

The cost is \$300

From: Isaac Schultz <[ischultz@rweng.com](mailto:ischultz@rweng.com)>

Sent: Tuesday, September 3, 2019 1:09 PM

To: Strasser, David <[dstrasser@trane.com](mailto:dstrasser@trane.com)>

Subject: Incremental cost for adding CO2 to Voyager or Intellipak air handler

**Alert: This is an external email.**

Hi David,

Could you provide a cost for adding CO2 sensors for demand controlled ventilation onto the Voyager and/or Intellipak air handlers? This is for the Hood River library project we spoke about last week. Thank you very much for your help on this!

Best,

Isaac



**ISAAC SCHULTZ**  
MECHANICAL | ENERGY DESIGNER  
9615 SW Allen Blvd, Suite 107  
Beaverton, OR 97005  
(o) 503.292.6000 (d) 503.726.3340

*"Dedicated to Building Lasting Relationships"*



APPENDIX D— EEM 2

EEM 2 Energy Consumption

**MONTHLY ENERGY CONSUMPTION**  
By SCI

----- Monthly Energy Consumption -----

Utility	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Total
<b>Alternative: 4                      EEM 2</b>													
<b>Electric</b>													
On-Pk Cons. (kWh)	6,108	5,801	5,552	5,557	7,745	9,883	13,624	10,928	8,885	6,424	6,779	6,243	93,529
On-Pk Demand (kW)	28	36	44	49	80	105	116	117	101	59	37	30	117
<b>Gas</b>													
On-Pk Cons. (therms)	823	536	401	259	122	68	57	135	190	442	814	1,092	4,939
On-Pk Demand (therms/hr)	5	5	5	5	3	2	2	3	3	6	8	8	8

Energy Consumption	
Building	43,125 Btu/(ft2-year)
Source	78,371 Btu/(ft2-year)
Floor Area	18,854 ft2

Environmental Impact Analysis	
CO2	No Data Available
SO2	No Data Available
NOX	No Data Available

Project Name:  
Dataset Name: HOOD RIVER LIB.TRC

TRACE® 700 v6.3.4 calculated at 08:30 AM on 09/05/2019  
Alternative - 4 Monthly Energy Consumption report Page 4 of 4


EEM 2 Energy Summary

<div style="border: 1px solid black; padding: 5px; display: inline-block;"> <b>ENERGY CONSUMPTION SUMMARY</b>                      By SCI                 </div>					
	Elect Cons. (kWh)	Gas Cons. (kBtu)	% of Total Building Energy	Total Building Energy (kBtu/yr)	Total Source Energy* (kBtu/yr)
<b>Alternative 4</b>					
<b>Primary heating</b>					
Primary heating	149	493,870	60.8 %	494,379	521,389
Other Htg Accessories	3,677		1.5 %	12,549	37,652
<b>Heating Subtotal</b>	<b>3,826</b>	<b>493,870</b>	<b>62.4 %</b>	<b>506,928</b>	<b>559,041</b>
<b>Primary cooling</b>					
Cooling Compressor	36,434		15.3 %	124,351	373,090
Tower/Cond Fans			0.0 %	0	0
Condenser Pump			0.0 %	0	0
Other Clg Accessories	2,207		0.9 %	7,533	22,602
<b>Cooling Subtotal....</b>	<b>38,642</b>		<b>16.2 %</b>	<b>131,884</b>	<b>395,691</b>
<b>Auxiliary</b>					
Supply Fans	14,511		6.1 %	49,526	148,592
Pumps	5,547		2.3 %	18,932	56,802
Stand-alone Base Utilities	5,256		2.2 %	17,939	53,822
<b>Aux Subtotal....</b>	<b>25,314</b>		<b>10.6 %</b>	<b>86,397</b>	<b>259,216</b>
<b>Lighting</b>					
Lighting	25,747		10.8 %	87,875	263,650
<b>Receptacle</b>					
Receptacles			0.0 %	0	0
<b>Cogeneration</b>					
Cogeneration			0.0 %	0	0
<b>Totals</b>					
<b>Totals**</b>	<b>93,529</b>	<b>493,870</b>	<b>100.0 %</b>	<b>813,083</b>	<b>1,477,599</b>
<p>* Note: Resource Utilization factors are included in the Total Source Energy value .                      ** Note: This report can display a maximum of 7 utilities . If additional utilities are used , they will be included in the total .</p>					
Project Name: Dataset Name: HOOD RIVER LIB.TRC			TRACE® 700 v6.3.4 calculated at 08:30 AM on 09/05/2019 Alternative - 4 Energy Consumption Summary report page 1		

EEM 2 Cost

20-75 Ton Packaged Industrial Rooftop

Job Information

		R&W Engineers 50 T Portland OR Main Office (B77)David Strasser	
Tag	VSP IPak	Model number	SFHILF50
Nominal Capacity	50 ton Air cooled	Unit Function	Natural Gas Heat
Development Sequence	R-410A refrigerant		

Model Description

Unit airflow	H: Single Zone		
Unit Function	Natural Gas Heat	System Control	VAV (DTC) SF & EF/RF VFD w/o Bypass
Nominal Capacity	50 ton Air cooled	Outside Air Selection	0-100% Economizer
Power Supply	460/60/3	Capacity/Efficiency Options	eFlex- Variable Speed Compressor
Heating Capacity	4:1 Mod. Low Gas Heat	Filter	High-Efficiency Throwaway Filters
Exhaust/Return fan options	100% -Exhaust 10 Hp w/Statitrac	Exhaust/Return fan drive selection	700 rpm

Cooling

Gross total capacity	637.98 MBh	Gross latent capacity	141.67 MBh
Gross sensible capacity	496.31 MBh	Net total capacity	584.55 MBh
Net sensible capacity	442.88 MBh	Net sensible heat ratio	75.76 %
Leaving coil DB	57.82 F	Leaving coil WB	56.91 F
Leaving unit DB	60.25 F	Leaving unit WB	57.83 F

Entering Conditions

Design airflow	20000 cfm	Exhaust/Return Airflow	20000 cfm
Ambient DB	95.00 F	Cooling EDB	80.00 F
Ent air relative humidity		Cooling EWB	67.00 F
Elevation	0.00 ft	Heating EAT	70.00 F

Heating

Input htg capacity	500.00 MBh	Output htg capacity	400.00 MBh
Heating delta T	18.43 F	Heating LAT	88.43 F
Output htg capacity w/fan	400.00 MBh		

Power

Supply Total Static Pressure	3.100 in H2O	Supply duct static pressure	1.000 in H2O
Roof curb (for static pressure add)		Return duct static pressure	0.500 in H2O
Supply Fan Hp	20 hp FC	Exhaust/Return fan options	100% -Exhaust 10 Hp w/Statitrac

Electrical values provided are estimated only and are subject to change without notice and may differ from nameplate values.

6/25/2019


Product Version

2004.05.24.1

Page 1 of 3

## 20-75 Ton Packaged Industrial Rooftop

### Job Information

		R&W Engineers 50 T Portland OR Main Office (B77)David Strasser	
Tag	VSP IPak	Model number	SFHLF50
Nominal Capacity	50 ton Air cooled	Unit Function	Natural Gas Heat
Development Sequence	R-410A refrigerant		
Actual supply motor power	19.26 bhp	Actual exhaust/return motor power	9.64 bhp
Supply Fan Drive Selection	1000 rpm	Exhaust/Return fan drive selection	700 rpm
Actual supply fan speed	1019 rpm	Actual exhaust/return fan speed	604 rpm
System power	63.46 kW	EER @ AHRI	10.8 EER
IEER @ AHRI	16.2 EER		

### Electrical

Max overcurrent protection	150.00 A	Min circuit ampacity	130.15 A
Min disconnect switch size	140.00 A	Recommended dual element	150.00 A
Compressor 1 count	1.00 Each	Compressor 1 RLA	19.10 A
Compressor 2 count	1.00 Each	Compressor 2 RLA	20.20 A
Compressor 3 count	1.00 Each	Compressor 3 RLA	32.60 A
Supply motor count	1	Supply fan motor FLA	24.70 A
Condenser fan FLA	10.80 A	Exhaust/return fan motor FLA	12.60 A
Electric heater FLA		Other FLA	2.00 A
Crankcase heater FLA		Supply fan count	2.00 Each

### Weights

Installed point load 1	732.6 lb	Installed point load 2	806.1 lb
Installed point load 3	835.2 lb	Installed point load 4	908.7 lb
Installed point load 5	926.2 lb	Installed point load 6	999.7 lb
Installed point load 7	1018.3 lb	Installed point load 8	1091.8 lb
Installed point load 9	1119.9 lb	Installed point load 10	1193.4 lb
COG - X dimension	17.10 ft	COG - Y dimension	3.92 ft
Total installed weight	9632.0 lb		

### Coil Specification

Evaporator rows	Evaporator face area	38.00 sq ft
Evaporator fin spacing		

### Acoustical Performance

Octave Band	<u>63 Hz</u>	<u>125 Hz</u>	<u>250 Hz</u>	<u>500 Hz</u>	<u>1 kHz</u>	<u>2 kHz</u>	<u>4 kHz</u>	<u>8 kHz</u>
Outdoor Noise								

Electrical values provided are estimated only and are subject to change without notice and may differ from nameplate values.

EEM 2 Costs

**RE: Rough Costs for a Voyager**  
Strasser, David

Sent: Tue 6/25/2019 4:47 PM

To: Mark Jones

CC: Burton, Nikki

Attachments: Voyager 3 Product Report.pdf (79 KB) 20-75 Ton Intellipak Product Report.pdf (50 KB)

Mark,

Attached are three selections and here are the budgets and IEER:

50 Ton std Voyager 12.3 IEER Budget \$ 53,000

50 Ton High Eff Voyager 14.5 IEER Budget \$ 57,000

50 Ton IPak with VFD Compressors 16.2 IEER Budget \$ 74,000

Thanks,

David

David Strasser

TraneOregon

Direct (503) 431-2535

Mobile (503) 602-8969

[DStrasser@Trane.com](mailto:DStrasser@Trane.com)

[www.TraneEngineer.com](http://www.TraneEngineer.com)

RE: Incremental cost for adding CO2 to Voyager or Intellipak air handler



Strasser, David <dstrasser@trane.com>

To Isaac Schultz

Reply

Reply All

Forward

Tue 9/3/2019 1:45 PM

The cost is \$300

From: Isaac Schultz <[ischultz@rweng.com](mailto:ischultz@rweng.com)>

Sent: Tuesday, September 3, 2019 1:09 PM

To: Strasser, David <[dstrasser@trane.com](mailto:dstrasser@trane.com)>

Subject: Incremental cost for adding CO2 to Voyager or Intellipak air handler

**Alert: This is an external email.**

Hi David,

Could you provide a cost for adding CO2 sensors for demand controlled ventilation onto the Voyager and/or Intellipak air handlers? This is for the Hood River library project we spoke about last week. Thank you very much for your help on this!

Best,

Isaac



**ISAAC SCHULTZ**  
MECHANICAL | ENERGY DESIGNER  
9615 SW Allen Blvd, Suite 107  
Beaverton, OR 97005  
(o) 503.292.6000 (d) 503.726.3340

*"Dedicated to Building Lasting Relationships"*