



City of Ketchum

CITY COUNCIL MEETING AGENDA MEMO

Meeting Date: Staff Member/Dept:

Agenda Item:

Recommended Motion:

Recommendation to authorize contract with Evergreen Technologies, LLC in the amount of \$68,166.76 for the installation of a 24 kW solar system on the Ketchum Fire Station.

Reasons for Recommendation:

- Three bids received with EGT being the low bidder
- Project consist of Installation of 24 kW solar system on the Fire Station garage roof
- The installation of a solar system aligns with the City's goals of improving sustainability and energy efficiency.
- EGT Solar's installation slated for early Summer 2025, avoiding additional delays or cost increases
- Expedited install to take advantage of Inflation Reduction Act tax rebate of 30%
- Staff received a letter of protest on this bid after bid opening due to perceived technicalities
- City attorney reviewed said letter of protest and determined there was no merit to the protest

Sustainability Impact:

This project has a positive impact on the City's sustainability goals by increasing the use of renewable energy sources, reducing the Fire Station's carbon footprint, and lowering future energy expenditures.

Financial Impact:

None OR Adequate funds exist in account:	IRA Tax rebate brings the total cost to \$46,340.73. Adequate funds exist in the CIP Fund for Sustainability Projects (03-4193-7210)
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Attachments:

1. Evergreen Technology, LLC - Proposal
2. PO 25109 – Evergreen Technology
3. Council Findings & Decision



CITY OF KETCHUM

City Hall

office: 208.726.3841

participate@ketchumidaho.org

P.O. Box 2315, 191 5th Street West, Ketchum, ID 83340

ketchumidaho.org

City of Ketchum Fire Station Solar

Project Introduction:

The City of Ketchum is seeking a quote from qualified vendors to install a rooftop solar energy system at the Ketchum Fire Station. The goal of this project is to install a 24 kW solar system with an annual energy supply of 230,000 kWh. The Fire Station was built to be solar ready, as there are two 2" empty conduits existing that were routed from the electrical room and up through the roof specifically for the installation of solar panels.

Submission Deadline: **April 4th, 2025 at 5:00 PM MST**

System Target Specifications:

- Size = 24 kW **or more**
- Annual energy supply = **31,000 kWh**

System Requirements:

1. System Design
 - a. Tier 1 premium black on black panels with a snow load capacity of 140lbs/sqft +
 - b. 25-year warranty panels. Performance, labor, failure.
 - c. UL 1741SB certified inverters
 - d. Ballast mounted or fixed tilt racking system
2. Structural engineering report for the roof to verify structural integrity
 - a. Building drawings available upon request
3. Timeline
 - a. Spring 2025 procurement
 - b. Spring/Early Summer 2025 installation and completion

Existing Infrastructure:

Picture of installation location – roof (current conditions) **SITE VISITS AVAILABLE UPON REQUEST**





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Ketchum Fire Station – Approved building permit electrical plan solar-ready mentions (Application File No. B20-049)

861 ROUTE (2) 2" EMPTY CONDUITS FROM THE ELECTRICAL ROOM, OVER TO APPARATUS STORAGE AND UP THROUGH ROOF FOR FUTURE SOLAR PANELS. INSTALL CAP ON CONDUITS AND MAKE WATER-TIGHT. COORDINATE ROUTING WITH OTHER TRADES PRIOR TO BEGINNING WORK.

862 ROUTE (2) 4" EMPTY CONDUITS FROM THE ELECTRICAL ROOM, OVER TO MECHANICAL CHASE AND UP THROUGH ROOF FOR FUTURE SOLAR PANELS. INSTALL CAP ON CONDUITS AND MAKE WATER-TIGHT. COORDINATE ROUTING WITH OTHER TRADES PRIOR TO BEGINNING WORK.

Bid Schedule:

Fill and submit all the information below for your quote:

City of Ketchum Fire Station Solar Bid Schedule					
#	Item	Unit	Quantity	Unit Price	Item Cost
1.	Site Preparation (clearing of rooftop snow and ice)	LS	1	\$0	\$0
2.	Solar Panel Procurement	Per panel	53	\$1.06/W \$487.60	\$25,842.80
3.	Solar Panel Installation	Per panel	53	\$0.55/W	\$13,409.00
4.	Mounting/Racking System Installation	LS	1	\$0.54/W	\$13,189.42
5.	Inverter Procurement	Per Unit	1	\$0.25/W	\$6,109.50
6.	Inverter Installation	Per Unit	1	included in labor above	
7.	Electrical Cabling and Connections	LS	1	included in racking costs	
8.	Monitoring and Controls System Installation	LS	1	\$652	\$652
9.	Permitting and Inspection	LS	1	\$2000	\$2000 (included in Labor)
TOTAL				\$ \$68,166.76	

Proposed System Specification Needed:

Expected System Size (kW): 24.38kW Annual energy Production: 25.30MWh (this assumes the panels will be covered in snow for 3 months of the year.)

Tilt Angle: 10

Mounting Method: UniRac Ballast Mount (Ecofoot 5D, rated for Heavy Snowload)

Delivery and Installation Timeline: July 2025



Ketchum Fire Station Solar Estimate For City of Ketchum

107 Saddle Rd. Ketchum ID 83340

bwhipple@ketchumidaho.org

208.806.7009



Building Registration #

RCE - 38500



Electrical Contractor #

ELE - 014096



Created On: 4/4/2025

This estimate is in accordance with "Residential Solar Energy System Disclosure Act"
Idaho Code Title 48 - Chapter 18

**401 N Main St.
Meridian ID**

208-795-5170

egtsolar.com

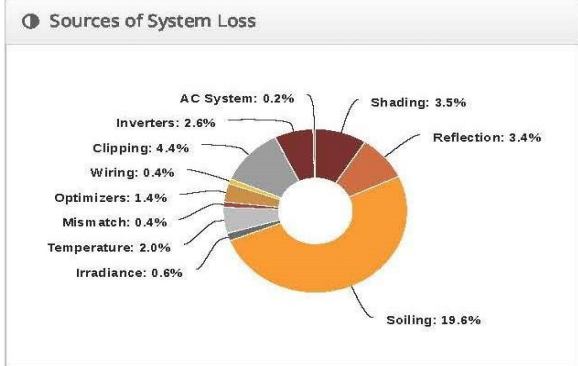
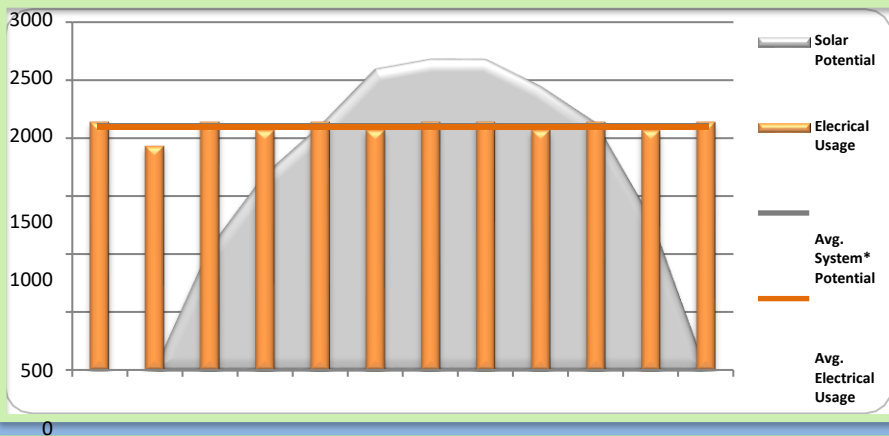
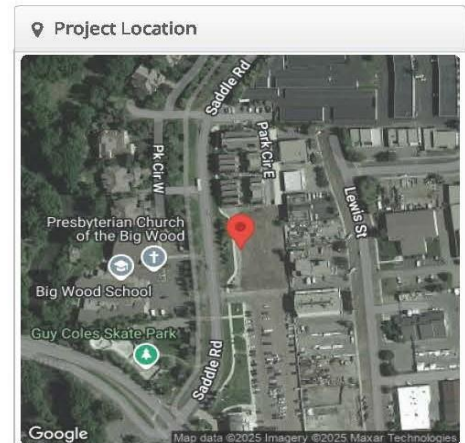


"Solar Energy System" - a system which collects sunlight to generate electricity to be used by the consumer

REC (460-Watt) SolarEdge 24kW Ketchum Fire Station, 107 Saddle Rd, Ketchum, ID 83340, United States

Report	
Project Name	Ketchum Fire Station
Project Address	107 Saddle Rd, Ketchum, ID 83340, United States
Prepared By	Quinn Skillin quinn@egtsolar.com

System Metrics	
Design	REC (460-Watt) SolarEdge 24kW
Module DC Nameplate	24.4 kW
Inverter AC Nameplate	17.3 kW Load Ratio: 1.41
Annual Production	29.77 MWh
Performance Ratio	66.4%
kWh/kWp	1,221.3
Weather Dataset	TMY, 0.04° Grid (43.69,-114.38), NREL (psm3)
Simulator Version	7293a8b98e-3988f74329-5b2ca06af1-2fcd7bf50

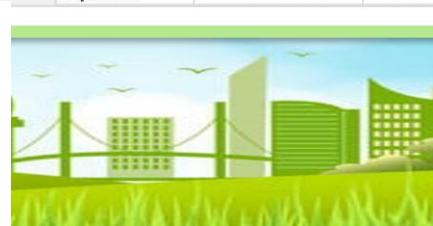


Jan				Feb				Mar				Apr				May				Jun				Jul				Aug				Sep				Oct				Nov				Dec			
⚡ Annual Production																																															
Irradiance (kWh/m²)		Description																Output								% Delta																					
		Annual Global Horizontal Irradiance																1,674.5																													
		POA Irradiance																1,838.0								9.8%																					
		Shaded Irradiance																1,773.8								-3.5%																					
		Irradiance after Reflection																1,712.7								-3.4%																					
		Irradiance after Soiling																1,377.2								-19.6%																					
		Total Collector Irradiance																1,377.3								0.0%																					
		Nameplate																33,587.8																													
		Output at Irradiance Levels																33,390.9								-0.6%																					
		Output at Cell Temperature Derate																32,731.7								-2.0%																					
Energy (kWh)		Output After Mismatch																32,598.4								-0.4%																					
		Optimizer Output																32,141.8								-1.4%																					
		Optimal DC Output																32,022.4								-0.4%																					
		Constrained DC Output																30,622.9								-4.4%																					
		Inverter Output																29,822.3								-2.6%																					
		Energy to Grid																29,774.5								-0.2%																					
Temperature Metrics																																															
																Avg. Operating Ambient Temp																10.2 °C															
																Avg. Operating Cell Temp																18.2 °C															
Simulation Metrics																																															
																Operating Hours																4359															
																Solved Hours																4359															

Condition Set														
Description		Condition Set 3												
Weather Dataset		TMY, 0.04° Grid (43.69,-114.38), NREL (psm3)												
Solar Angle Location		Meteo Lat/Lng												
Transposition Model		Perez Model												
Temperature Model		Sandia Model												
Temperature Model Parameters	Rack Type		a		b		Temperature Delta							
	Fixed Tilt		-3.56		-0.075		3°C							
	Flush Mount		-2.81		-0.0455		0°C							
	East-West		-3.56		-0.075		3°C							
	Carport		-3.56		-0.075		3°C							
Soiling (%)		J	F	M	A	M	J	J	A	S	O	N	D	
		100	100	50	25	2	2	2	2	2	2	25	90	
Irradiation Variance		5%												
Cell Temperature Spread		4° C												
Module Binning Range		-2.5% to 2.5%												
AC System Derate		0.50%												
Trackers	Maximum Angle							Backtracking						
	60°							Enabled						
Module & Component Characterizations	Type		Component					Characterization						
	Module		REC460AA Pure-RX (REC)					Spec Sheet Characterization, PAN						
	Inverter		SE17.3KUS (2021) (SolarEdge)					Spec Sheet						
	Buck Boost Optimizer		P1101 (SolarEdge)					Mfg Spec Sheet						



solar**edge**



**TRIPLE GUARD
WARRANTY**
25 YEARS
★ PRODUCT
★ PERFORMANCE
★ LABOR

@ Components

m Wiring Zones

Component	Name	Count	Desi::ription	Combiner Poles	String Size	Stringing Strategy
Inverters	SE17.3KUS (2021) (SolarEdge)	1 (17.3 kW)	Wiring Zone		7-14	Along Racking
AC Panels	1 input AC Panel					

m Field Segments

AC Home Runs	8 AWG (Copper)	2(21.6ft]	Description Racking Orientation				Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Strings	10AWG (Copper)	4 (414,2 ft]											
Optimizers	P1101(SolarEdge)	28(30.8 kW)	Field Segment 1	Fixed Tilt	Landscape (Horizontal)	Module: 19.5°	Module: 175.25854°	1.0 ft	1x1	53	53	24.4 kW	
Module	REC,REC460AAPure-RX (460W)	53(24.4 kW)											





Financial Assumptions/Cash flow

2024
TOP SOLAR
CONTRACTORS
CELEBRATING U.S. SOLAR INSTALLERS

Solar Savings & Benefits	Solar	Utility
Cost of Electricity	\$0.073/kWh	\$0.226/kWh
Annual Inflation Rate	0.0%	5.0%
Produced vs Utility	100.5%	0%
First Year Utility Savings	\$1,403	--

Solar Investment Return	
Avg. Return on Investment	5.8%
Internal Rate of Return	2%
Net Present Value	-\$18,085
Profitability Index	0.54

Our estimation of the electrical usage, energy offset and proposed system's designed is based upon the information you have provided
Customer assumes average energy charges to be \$154 a month, there was not sufficient data on power bill

Your Projected System Cash Flow

Year of Operation	Cost at Installation	Federal Direct Pay	Idaho Tax Deduction	Depreciation Tax Benefit	25-Year Utility Expense	Annual Cash Flow	Cumulative Cash Flow
At install	(\$68,167)		\$0	\$0	\$0	(\$68,167)	(\$68,167)
1		20,450.03	344.00	-	1,402.80	22,196.83	(45,969.93)
2		-	344.00	-	1,472.94	1,816.94	(44,152.99)
3		-	344.00	-	1,546.59	1,890.59	(42,262.40)
4		-	344.00	-	1,623.92	1,967.92	(40,294.48)
5		-	-	-	1,705.12	1,705.12	(38,589.36)
6		-	-	-	1,790.37	1,790.37	(36,798.99)
7		-	-	-	1,879.89	1,879.89	(34,919.10)
8		-	-	-	1,973.88	1,973.88	(32,945.21)
9		-	-	-	2,072.58	2,072.58	(30,872.63)
10		-	-	-	2,176.21	2,176.21	(28,696.43)
11		-	-	-	2,285.02	2,285.02	(26,411.41)
12		-	-	-	2,399.27	2,399.27	(24,012.14)
13		-	-	-	2,519.23	2,519.23	(21,492.91)
14		-	-	-	2,645.19	2,645.19	(18,847.71)
15		-	-	-	2,777.45	2,777.45	(16,070.26)
16		-	-	-	2,916.33	2,916.33	(13,153.93)
17		-	-	-	3,062.14	3,062.14	(10,091.79)
18		-	-	-	3,215.25	3,215.25	(6,876.54)
19		-	-	-	3,376.01	3,376.01	(3,500.53)
20		-	-	-	3,544.81	3,544.81	44.29
21		-	-	-	3,722.05	3,722.05	3,766.34
22		-	-	-	3,908.16	3,908.16	7,674.50
23		-	-	-	4,103.56	4,103.56	11,778.06
24		-	-	-	4,308.74	4,308.74	16,086.80
25		-	-	-	4,524.18	4,524.18	20,610.98
Total	(\$68,167)	\$20,450	\$1,376	\$0	\$66,952	\$20,611	\$20,611

Note

*THIS IS AN ESTIMATE. UTILITY RATES MAY GO UP OR DOWN AND ACTUAL SAVINGS, IF ANY, MAY VARY. HISTORICAL DATA IS NOT NECESSARILY REPRESENTATIVE OF FUTURE RESULTS. FOR FURTHER INFORMATION REGARDING RATES, CONTACT YOUR LOCAL UTILITY OR THE IDAHO PUBLIC UTILITIES COMMISSION.

*TAX AND OTHER FEDERAL, STATE, AND LOCAL INCENTIVES VARY AS TO REFUNDABILITY AND ARE SUBJECT TO CHANGE OR TERMINATION BY LEGISLATIVE OR REGULATORY ACTION, WHICH MAY IMPACT SAVINGS ESTIMATES. CONSULT A TAX PROFESSIONAL FOR MORE INFORMATION.



EGT
SOLAR

PROJECT ESTIMATE

2024
TOP SOLAR
CONTRACTORS
CELEBRATING U.S. SOLAR INSTALLERS



Client:

City of Ketchum
107 Saddle Rd.
Ketchum ID 83340
208.806.7009

Project Name

Ketchum Fire Station

Qty

PRODUCT DESCRIPTION

AMOUNT

PV Solar System

1	24.38 KiloWatt Solar PV System - (53 - REC 460 Watt Panels)	\$53,714.01
1	System Design & Engineering	2,500.00
1	EGT Solar Installation	13,409.00

Subtotal **\$69,623.01**

Power Monitoring

1	SolarEdge 5-Year Cell Card	\$552.00
1	EGT Power Monitoring Installation	100.00

Subtotal **\$652.00**

Battery Backup System

	None	-
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Subtotal **\$0.00**

"Solar Retailer" - a person who sells or proposes to sell a residential solar energy system to a customer under a purchase agreement. This document is not a solar purchase agreement or a system purchase agreement, this is a solar estimate, made in good faith, based on historical usage and estimated financial calculations which provides the basis for the proposed system.

SUBTOTAL **\$70,275.01**

(New Construction) 3rd Party Tax Credits -

Idaho Solar Tax Deduction **(1,376.00)**

30% Federal Tax Credit **(20,450.03)**

PAY THIS AMOUNT **\$70,275.01**

CASH DISCOUNT **\$2,108.25**

CASH TOTAL* **\$68,166.76**

Net Cost After Tax Benefits **46,340.73**

Customer Signature: _____

Date: _____

This is not an invoice.

This is an estimated cost of the proposed system.

An actual invoice will be sent out at time of payment.

*In order to receive the cash discount all payments must be paid via cash, check or ACH.



CITY OF KETCHUM

PO BOX 2315 * 191 5TH ST. * KETCHUM, ID 83340
Administration 208-726-3841 (fax) 208-726-8234

PURCHASE ORDER

BUDGETED ITEM? ____ Yes ____ No

PURCHASE ORDER - NUMBER: 25109

To: 6328 EVERGREEN TECHNOLOGY, INC 401 N MAIN ST MERIDIAN ID 83642	Ship to: CITY OF KETCHUM PO BOX 2315 KETCHUM ID 83340
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P. O. Date	Created By	Requested By	Department	Req Number	Terms
04/28/2025	CCHING	CCHING			

Quantity	Description	Unit Price	Total
1.00	Fire Station Solar 03-4194-7200	68,166.76	68,166.76
	SHIPPING & HANDLING		0.00
	TOTAL PO AMOUNT		68,166.76

Authorized Signature

**BEFORE THE CITY COUNCIL
OF THE
CITY OF KETCHUM**

In the Matter of the Bid Protest of:)	
)	
Bluebird Solar (Objector))	FINDINGS AND
)	DECISION
Re: Fire Station Solar Request for Bids)	
)	
)	

This matter comes before the City Council of the City of Ketchum ("Council"), as an asserted bid protest with relation to the City Fire Station Solar Request for Bids and staff recommendation of intent to award.

The Council finds that:

1. The inclusion of information about opportunity to protest or object to award was mistakenly included in the City's April 24, 2025 Notice of Intent to Award letter.
2. This project's Request for Bids was for public works construction procurement pursuant to Idaho Code 67-2805(1), which does not provide for objection after receipt of bids or upon notice of intent to award.
3. There is no City ordinance or policy providing for bid objections or protest in these circumstances.
4. This matter is dismissed for lack of jurisdiction or process for the Council to consider.
5. Contingent Review on the Merits: Even with considering the above procedural reasons for dismissal, upon contingent review on the merits the alleged protest/objection raises issues that are not relevant to the recommended Notice of Award. The City is constrained by state procurement statutes and this project must be awarded based upon the lowest responsive bid. Dispute between bidders as to misleading or misinterpreted

information are only relevant if such leads to an apparent lowest bidder being disqualified as nonresponsive. There is no evidence to support the Protester's allegation that misleading or misunderstanding information caused Protester to lose the award. In this situation, neither bidder is deemed disqualified or nonresponsive. The Protester was not the lowest bid, regardless of responsiveness. The successful bidder is determined to be both responsive and the lowest total cost – thus necessitating either an award to the successful bidder or a rejection of all bids and re-bid, pursuant to Idaho Code 67-2805(1)(d).

Based upon the foregoing review and analysis, including contingent review on the merits only if later deemed necessary and applicable, the Council dismisses and/or denies the protest as presented in this matter, and authorizes the Mayor to sign this Decision on behalf of the City Council.

Neil Bradshaw, Mayor

ATTEST:

By: _____
Trent Donat, City Clerk