

Exhibit A- The IGA Proposal
(next page)

Cambrian School District: Existing Solar PV Status & Proposed Additional PV Revisions

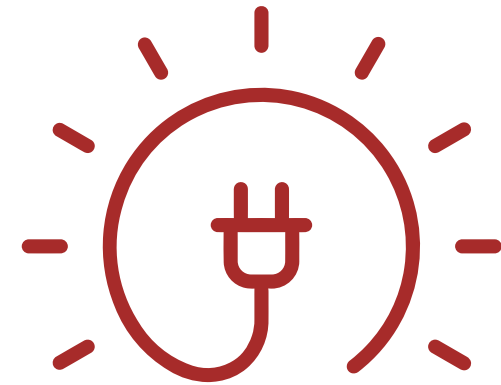


December 06, 2024



Agenda

- Interconnection Applications and Existing Consumption
- Updated Utility Analysis
- Results from Detailed Inspections
- Changes to Solar PV Designs
- Projected Project Financials



Recommended Adjustments to Interconnection Applications

The following table uses the adjusted electric utility baseline as the target annual solar PV production and compares it to the approved interconnection application productions. Upsizing solar kW-AC capacity would require a new interconnection application and should be avoided to maintain NEM-2 status. Downsizing solar PV is allowed by the utility.

Site	Reference Annual Facility Electric Consumption (kWh)	Approved Interconnection Application Production (kWh)	Recommended Changes to Interconnection Application
Bagby Elementary School	80,432	147,500	Decrease system size to offset approx. 80 MWh annually
District Office	201,029	53,840	No change
Fammatre Elementary School	106,968	110,500	No change
Ida Price Middle School	269,296	132,300	No change
Sartorette Elementary School	115,183	106,000	No change
Steindorf STEAM Magnet School	144,103	106,700	No change

Note: the following slides provide Centrica's recommendation for solar PV designs such that NEM-2 status is maintained. In certain instances, the targeted solar PV production is exceeded by increasing solar DC capacity while maintaining AC capacity. This is allowed by the utility and is intended to provide as much value as possible while maintaining NEM-2 status.

Bagby Elementary Updated Utility Analysis & Inspection Results

Updated Utility Analysis Results

- Utility bills have been analyzed between October 2023 and September 2024 and compared with electricity usage over the previous 3 years (graph shown to right).

Inspection Results

- Various issues with power monitoring/ metering; this does not affect electric generation
- Weather station is offline
- Inverter 2A arc-fault alarm. System rebooted and alarm cleared. Inverter is still generating but further inspection of electrical connectors is needed.
- Inverter 2B not communicating to monitoring data logger. Inverter is still generating but further inspection of RS485 communication wiring is needed

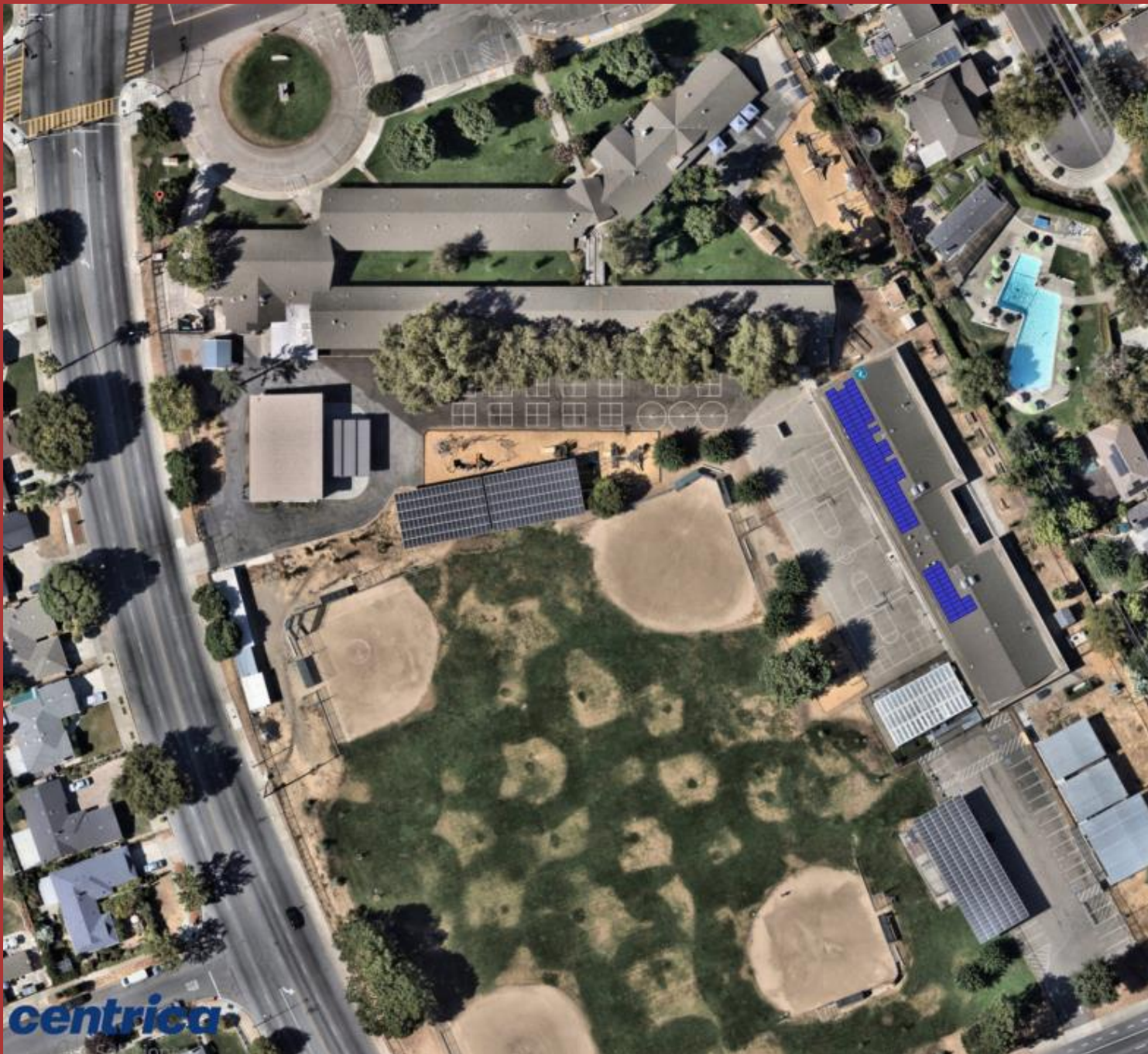
Bagby Elementary Historical Electric Consumption



Solar PV Sizing Considerations

Reference Annual Facility Electric Consumption	80,432 kWh
Approved Interconnection Application Production	147,500 kWh

Recommendation: downsize solar to meet 80,432 kWh production.



Bagby Elementary School Design Details

Features and benefits

Install approx. **55.6 kW-DC** flush mounted solar PV arrays on roof.

Roof condition from 2019 assessment

Rating: Fair

Condition: "The shingle roofs are in fair condition as they were installed in 2002. Some minor shingle repairs are recommended."

- ✓ Overall PV System Size (kW DC): 55.6
- ✓ Expected Annual Production (kWh): 79,577

District Office Updated Utility Analysis & Inspection Results

Updated Utility Analysis Results

- Utility bills have been analyzed between October 2023 and September 2024 and compared with electricity usage over the previous 3 years (graph shown to right).

District Office Historical Electric Consumption



Inspection Results

- Production meter is recording less power than the system is generating. Suspect faulty CTs on meter as they were found to be phase imbalanced.
- Back-of-module temperature sensor is not reporting data on monitoring portal.
- Facility consumption meter is not reporting data during non-solar hours.

Solar PV Sizing Considerations

Reference Annual Facility Electric Consumption	201,029 kWh
Approved Interconnection Application Production	53,840 kWh

Recommendation: keep existing interconnection application as is.



District Office Design Details

Features and benefits

Install approx. **40.2 kW-DC** flush mounted solar PV arrays on roof.

Roof condition from 2019 assessment

Rating: Good

Condition: "These roofs are in good condition. The DO whirly birds should be replaced with low rise vents. No other recommendations at this time."

- ✓ Overall PV System Size (kW DC): 40.2
- ✓ Expected Annual Production (kWh): 54,093

Fammatre Elementary School Updated Utility Analysis & Inspection Results

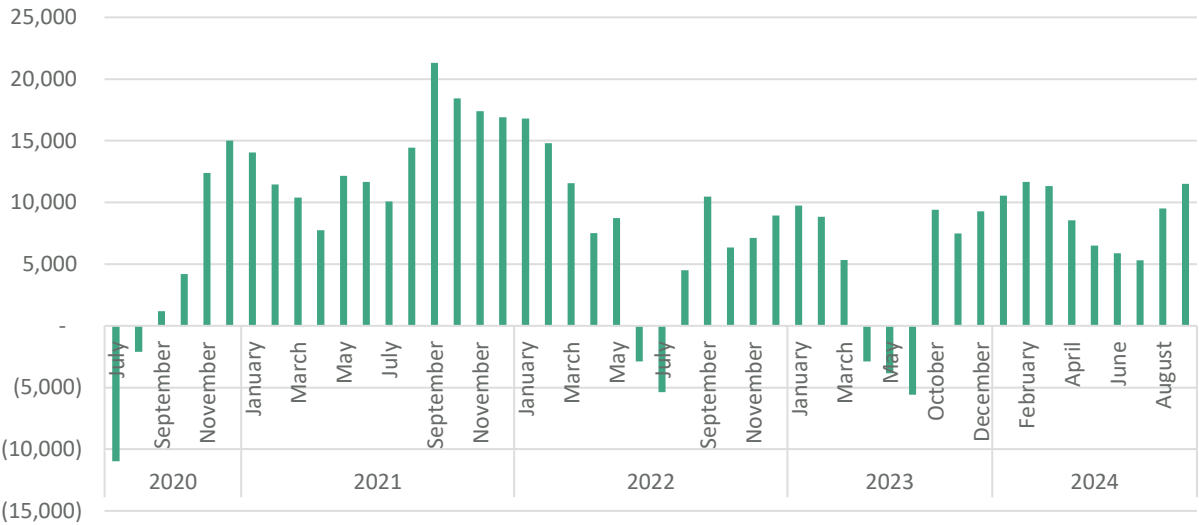
Updated Utility Analysis Results

- Utility bills have been analyzed between October 2023 and September 2024 and compared with electricity usage over the previous 3 years (graph shown to right).

Inspection Results

- Data Acquisition System (DAS) had an insect infestation due to open knockout in enclosure. This should be sealed to ensure no future intrusion.
- No issues affecting production were found.

Fammatre Historical Electric Consumption



Solar PV Sizing Considerations

Reference Annual Facility Electric Consumption	106,968 kWh
Approved Interconnection Application Production	110,500 kWh

Recommendation: keep existing interconnection application as is.

Fammatre Elementary School Design Details

Features and benefits

Install approx. **66.0 kW-DC** flush mounted solar PV arrays on roof.

Roof condition from 2019 assessment

Rating: Good

Condition: “The shingle roofs are in good condition. The perimeter membrane has begun to deteriorate. A restoration coating would extend its life preventing further deterioration.”

- ✓ Overall PV System Size (kW DC): 66.0
- ✓ Expected Annual Production (kWh): 106,174



Ida Price Middle School Updated Utility Analysis & Inspection Results

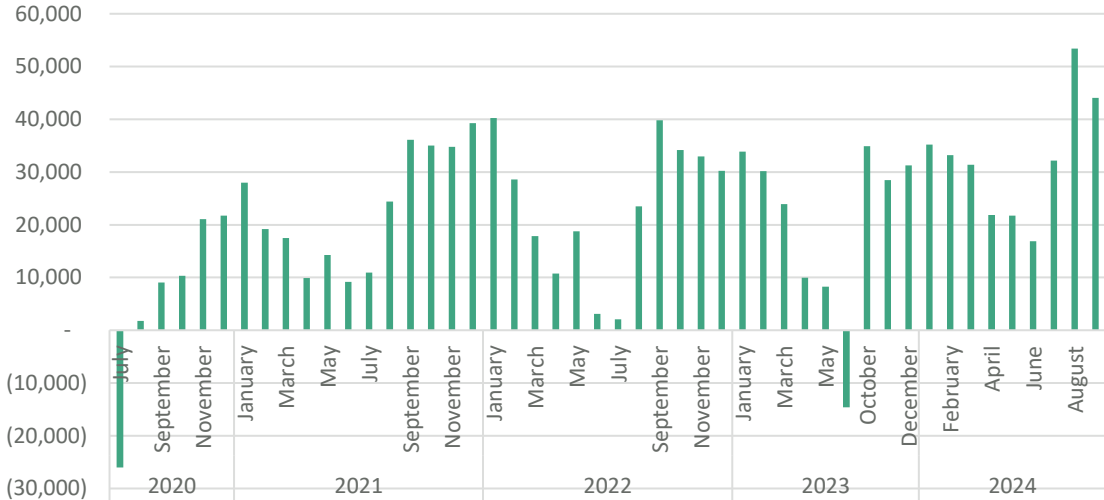
Updated Utility Analysis Results

- Utility bills have been analyzed between October 2023 and September 2024 and compared with electricity usage over the previous 3 years (graph shown to right).

Inspection Results

- Original 30 kW inverters have been replaced with 60 kW inverters in 2 locations, identifying placards should be updated to stay in compliance with approved interconnection. This does not affect production.
- Ambient weather temperature sensor is faulty. This does not affect production.

Ida Price Historical Electric Consumption



Solar PV Sizing Considerations

Reference Annual Facility Electric Consumption	269,296 kWh
Approved Interconnection Application Production	132,300 kWh

Recommendation: keep existing interconnection application as is.



Ida Price Middle School Design Details

Features and benefits

Install approx. 85.8 kW-DC flush mounted solar PV arrays on roof.

- ✓ Overall PV System Size (kW DC): 85.8
- ✓ Expected Annual Production (kWh): 133,861



Sartorette Elementary School Design Details

Features and benefits

Install approx. 77.0 kW-DC flush mounted solar PV arrays on roof.

Roof condition from 2019 assessment

Rating: Good

Condition: "The shingle roofs are in good condition. Some damaged/missing shingles are present. These areas should be repaired properly with replacement shingles."

- ✓ Overall PV System Size (kW DC): 77.0
- ✓ Expected Annual Production (kWh): 105,482

Steindorf STEAM Updated Utility Analysis & Inspection Results

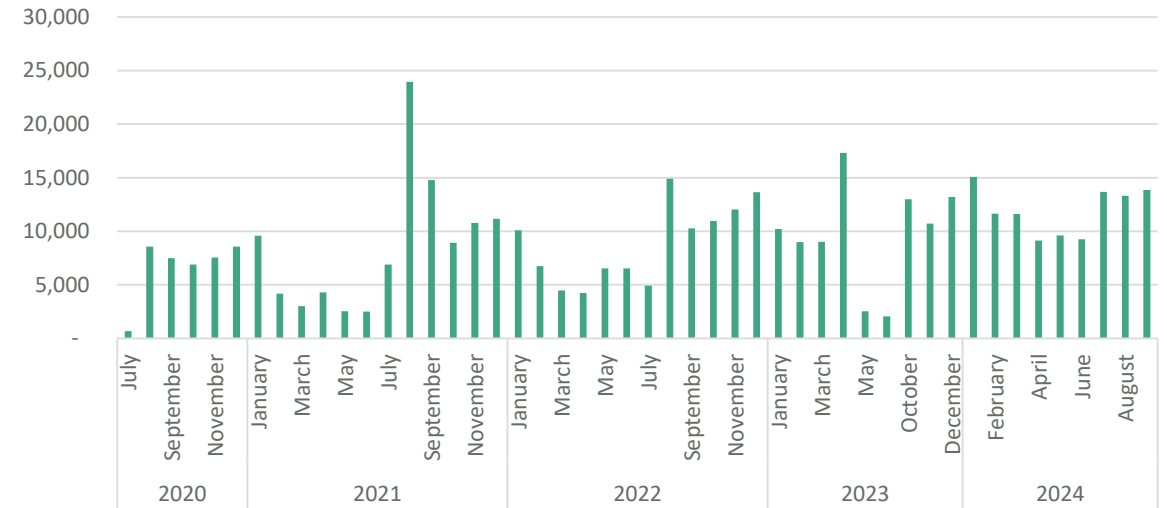
Updated Utility Analysis Results

- Utility bills have been analyzed between October 2023 and September 2024 and compared with electricity usage over the previous 3 years (graph shown to right).

Inspection Results

- Data Acquisition System (DAS) had an insect infestation due to open knockout in enclosure. This should be sealed to ensure no future intrusion.
- No issues affecting production were found.

Steindorf Historical Electric Consumption



Solar PV Sizing Considerations

Reference Annual Facility Electric Consumption	144,103 kWh
Approved Interconnection Application Production	106,700 kWh

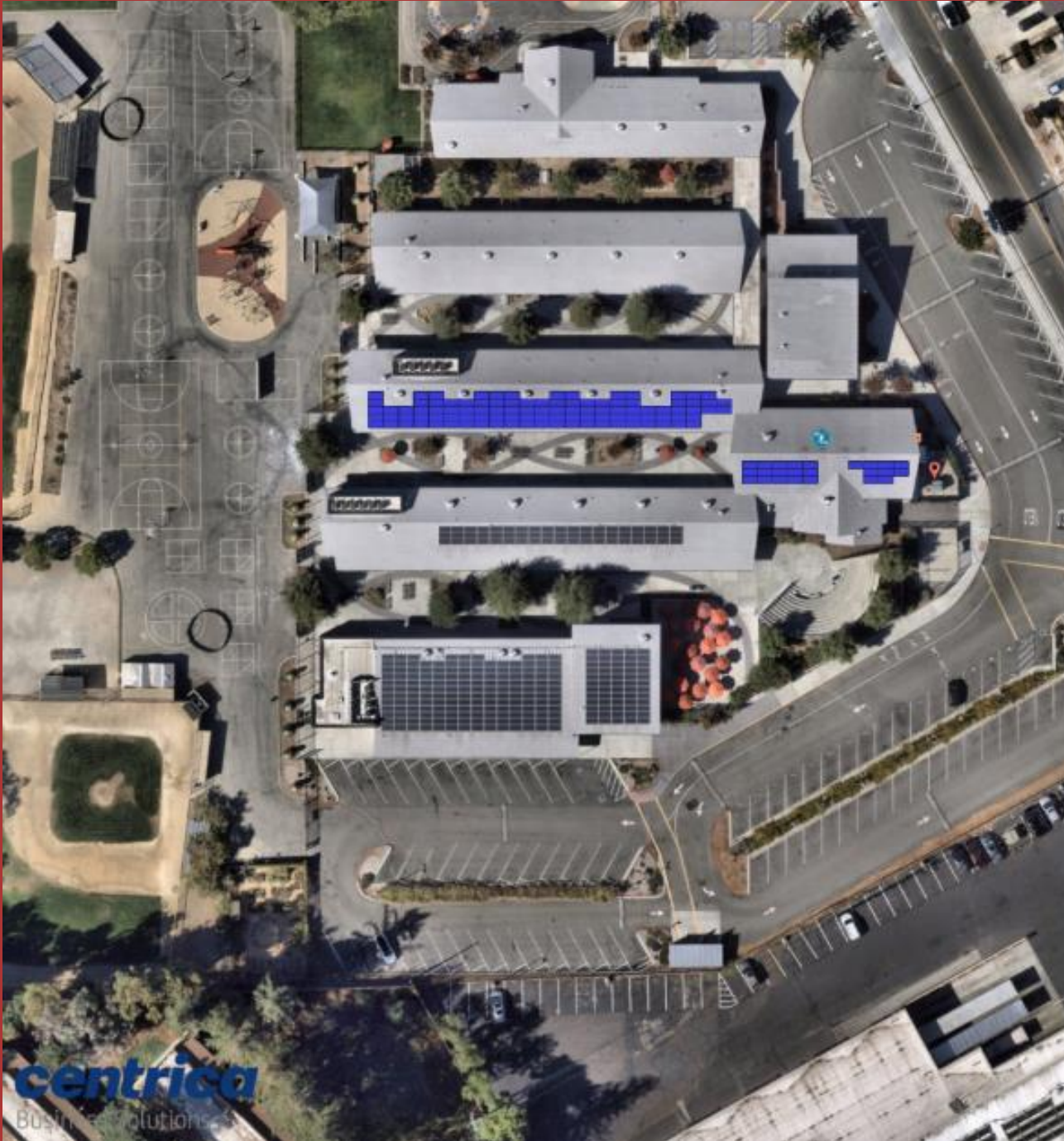
Recommendation: keep existing interconnection application as is.

Steindorf STEAM Magnet School Design Details

Features and benefits

Install approx. 68.8 kW-DC flush mounted solar PV arrays on roof.

- ✓ Overall PV System Size (kW DC): 68.8
- ✓ Expected Annual Production (kWh): 107,249



Site Breakout- Project Costs and Savings

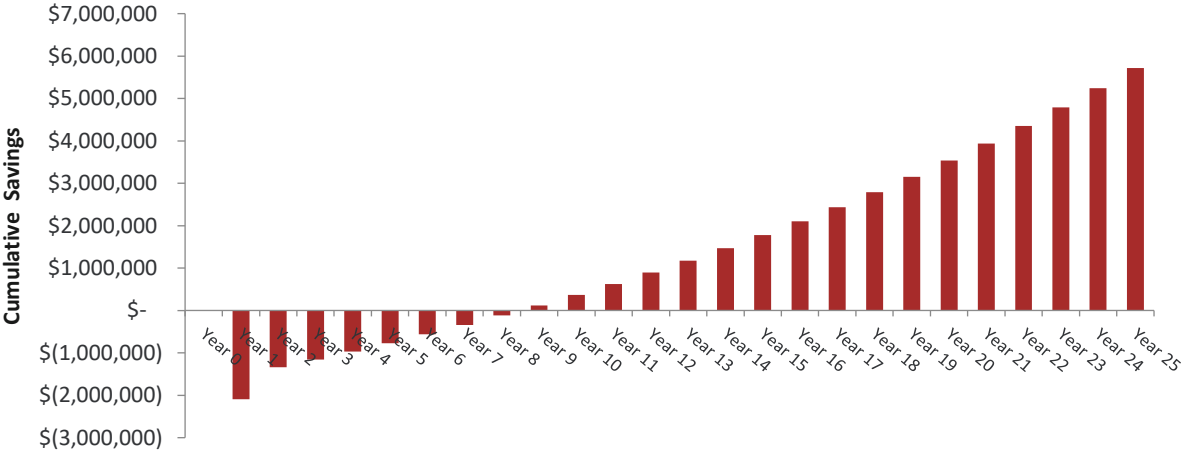
Site	Annual Cost Savings	Annual CO2 Reduction (metric tons)	Project Investment	Investment Tax Credit (IRA)	Net Project Investment	Simple Payback (yrs)
Bagby Elementary	\$26,851	38	\$353,224	\$90,072	\$263,152	9.8
District Office	\$10,488	26	\$259,720	\$66,229	\$193,492	18.4
Fammatre Elementary	\$17,818	50	\$357,872	\$91,257	\$266,614	15.0
Price Middle	\$51,447	64	\$458,734	\$116,977	\$341,757	6.6
Sartorette Elementary	\$27,617	50	\$440,524	\$112,334	\$328,190	11.9
Steindorf STEAM	\$36,248	51	\$390,598	\$99,602	\$290,995	8.0



Project Financials

Proposed Project Investment	\$2,260,671
Year 1 Utility Cost Savings	\$170,469
Inflation Reduction Act, DirectPay for ITC for Tax-Exempt Entities/State Governments	\$576,471
Net Project Investment (after incentives & DirectPay)	\$1,684,200
Cash Purchase Break Even Point	9 years
Greenhouse Gas Emission Reduction	279 metric tons

Cash Purchase Cumulative Cashflow



Next Steps

District approval of scope adjustments.

Present to Sub-committee (12/11).

Assemble board presentation for agenda item.

Vote to utilize CA Government Code 4217 at proceeding board meeting.

Public notice for GC 4217 Resolution vote (2 weeks prior to vote).

Board meeting for project approval and resolution for project funding (1/16).

Thank you

Brooklyn Stewart

Sr. Account Executive

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E: Brooklyn.stewart@centrica.com



Exhibit B- Certificate of Substantial Completion
(next page)

CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT: (*****NAME & ADDRESS*****)

CONTRACTOR: (*****NAME & ADDRESS*****)

County Bid Number:

Contract For: (***** NAME OF PROJECT*****)

Contract Date:

DATE OF ISSUANCE:

PROJECT OR DESIGNATED PORTION SHALL INCLUDE:

The Work performed under this Contract has been reviewed and found to be substantially complete. The Date of Substantial Completion of the Project or portion thereof designated above is hereby established as:

(*****DATE OF SUBSTANTIAL COMPLETION*****)

which is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below.

DEFINITION OF DATE OF SUBSTANTIAL COMPLETION

The Date of Substantial Completion of the Work or designated portion thereof is the Date certified by the Engineer when construction is sufficiently complete, in accordance with the Contract Documents, so the Owner can occupy or utilize the Work or designated portion thereof for the use for which it is intended, as expressed in the Contract Documents.

A list of items to be completed or corrected, prepared by the Engineer/Architect, is attached hereto. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all work in accordance with the contract documents. The date of commencement of warranties for items on the attached list will be the date of final payment unless otherwise agreed to in writing.

(Company Name) _____
ENGINEER/ARCHITECT By (Signature) _____ DATE _____
Printed Name _____

The Contractor will complete or correct the Work on the list of items attached hereto within 30 days from the above Date of Substantial Completion.

(Company Name) _____
CONTRACTOR BY (Signature) _____ DATE _____
Printed Name _____

The Owner accepts the Work or designated portion thereof as substantially complete and will assume full possession thereof at **11:59 PM** on (*****DATE OF ACCEPTANCE*****)

Saratoga County _____
OWNER BY (Signature) _____ DATE _____
Joseph C. Ritchey _____
Printed Name _____

CERTIFICATE OF SUBSTANTIAL COMPLETION

PROJECT: _____

List of Items to be Completed:

1.

Schedule 1- Facilities

Bagby Elementary School: 1840 Harris Ave, San Jose, CA 95124

District Office: 4115 Jacksol Dr, San Jose, CA 95124

Fammatre Elementary School: 2800 New Jersey Ave, San Jose, CA 95124

Ida Price Middle School: 2650 New Jersey Ave, San Jose, CA 95124

Sartorette Elementary School: 3850 Woodford Dr, San Jose, CA 95124

Steindorf STEAM Elementary: 3001 Ross Ave, San Jose, CA 95124

Schedule 2- Scope of Work

ECM#1: Solar PV Installation

Facilities Affected

- Bagby Elementary School
- District Office
- Fammatre Elementary School
- Ida Price Middle School
- Sartorette Elementary School
- Steindorf STEAM Elementary School

Summary

Centrica Business Solutions Services has determined that the sites listed above are viable for solar PV expansion/ addition. The system was sized to achieve the maximum feasible production based on the site's electrical and space constraints.

The Solar PV systems will go through a detailed design process during implementation to determine the final product specifications and system sizing of the solar panels and inverters.

The Solar PV systems will have the following characteristics:

- Tier 1 solar panels and inverters
- Solar production monitoring software
- System AC sizing (kW-AC) per Interconnection Agreement with utility. Adjustments to existing applications as necessary
- Change current rate structure to NEM 2.0 rate structure

The system sizing is as follows:

Site	PV Size/Type (kW DC)	Expected Annual Production
Bagby Elementary School	55.6 kW/ Rooftop	79,577 kWh
District Office	40.2 kW/ Rooftop	54,093 kWh
Fammatre Elementary School	66.0 kW/ Rooftop	106,174 kWh
Ida Price Middle School	85.8 kW/ Rooftop	133,861 kWh
Sartorette Elementary School	77.0 kW/ Rooftop	105,482 kWh

Steindorf STEAM Elementary School	68.8 kW/ Rooftop	107,249 kWh
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Scope of Work Details

- Design
 - A full set of California licensed structural and electrical stamped drawings for all solar PV Systems listed above, as required by the Authority Having Jurisdiction (AHJ).
- Implementation Services
 - Pre-construction services
 - Product Submittals
 - Pre-construction conference with CVMVCD representatives
 - Site Mobilization
 - Procurement of all materials
 - Coordination with the DSA for permits
 - Completion of all required field inspections and documentation.
 - All utility interconnection application adjustments and coordination
 - Project installation as stated in Schedule 3
 - Installation of cloud based solar PV monitoring solution
 - Project Closeout:
 - Operations and Maintenance manuals
 - Warranty Documents
 - Customer Training
- Electrical
 - Compliance with Pacific Gas & Electric (PG&E) Interconnection Requirement Rules, Regulations 21, and UL 1741-SA compliant
 - Install positive attachment roof mounting system with associated roof protection and required seismic attachments
 - Install module on the module racks; run equipment ground wiring; wire DC strings to Inverters
 - Install Balance of System (BOS) components including AC combiner boxes (as required), disconnect switches (as required), and all wiring between electrical components
- Commissioning
 - Following installation, the system components will be tested according to manufacturer's recommendations to confirm proper functionality
 - Inspections by Utility Service Provider or DSA will be coordinated by Centrica Business Solutions Services
- Warranty service and labor within one year of substantial completion of this FIM.

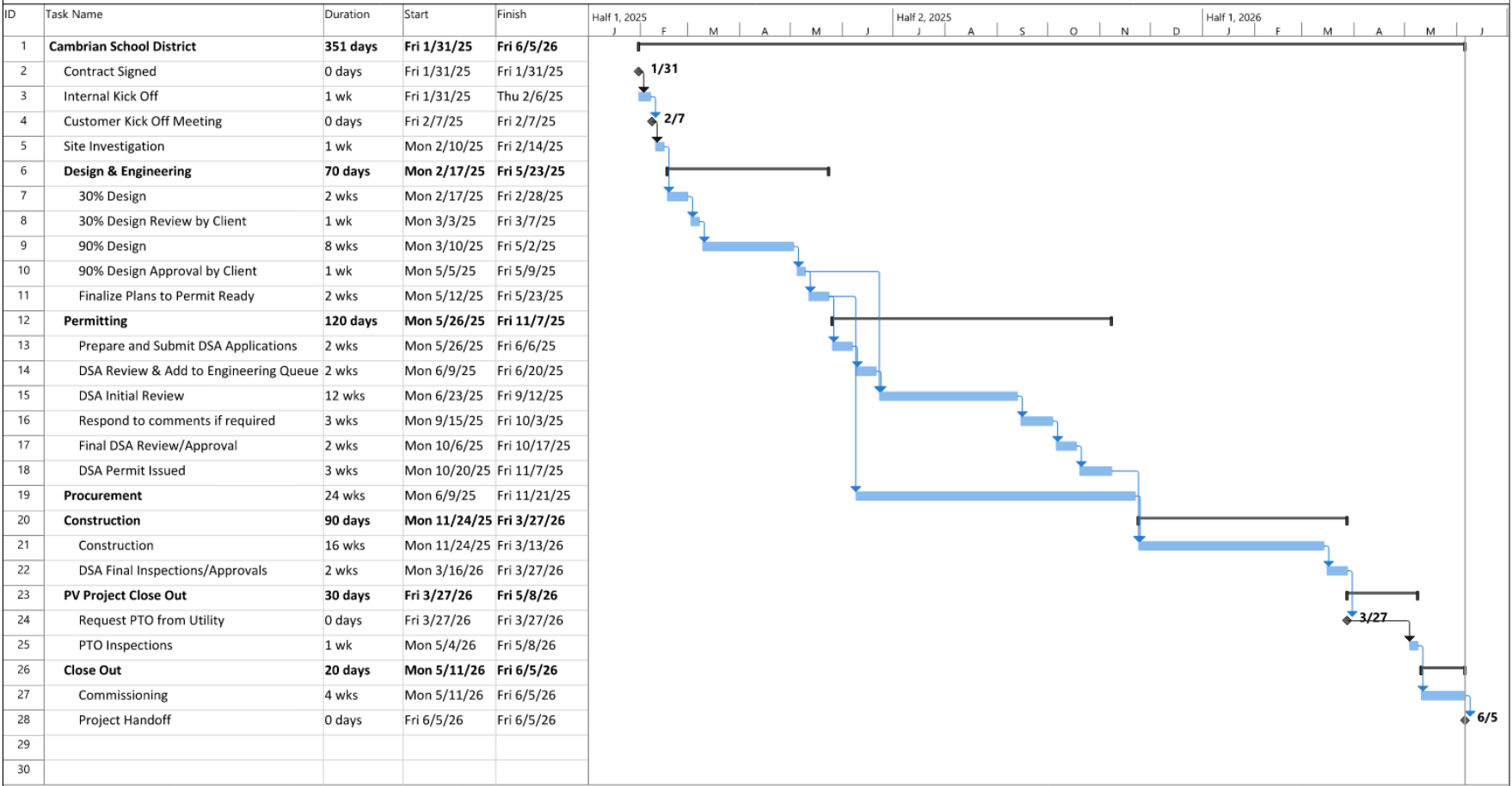
- Assumptions
 - a. This measure has been priced with prevailing wage rates.
 - b. Assumes no additional variance, historic district, special use or any other Special Permits will be required except for those defined herein. Street closure permits and police details are not included, and if needed will be presented as a change order request
 - c. All work will be performed during 1st shift Monday through Friday
 - d. Existing roof surfaces are in adequate condition and any repairs shall be performed by others
 - e. Maintenance of proposed and existing solar PV systems shall be executed via a separate contract
- Exemptions and Exclusions
 - Any existing electrical infrastructure upgrades and utility upgrades are excluded
 - Impacts to the Work due to Concealed Conditions, or correction of such Concealed Conditions are excluded, including but not limited to:
 - a. De-watering
 - b. Removal of unsuitable soils
 - Correction, testing, or remediation of mold, fungus, mildew, or organic pathogens are excluded
 - Removing or repairing rot or insect infestation is excluded
 - Removal of, disposal of, or work involving any materials containing asbestos or any other Hazardous Conditions is excluded
 - Moving or relocation any personal property belong to any Personal that in not Centrica or Centrica subcontractor or supplier is excluded
 - Work at the site due to ADA requirements by DSA are excluded
 - Hiring of Health Safety Professional to monitor and track COVID-19
 - Performance guarantee for solar PV production is excluded
 - Operation and Maintenance is excluded
 - Temporary power during shutdowns for interconnection work is excluded
 - Painting of any equipment or conduit is excluded
 - Buy American, or American Made products are excluded

Schedule 3- ECM Work Schedule

(next page)

12/13/2024

Cambrian School District Preliminary Solar Project Schedule



Task		Project Summary		Manual Task		Start-only		Deadline	
Split		Inactive Task		Duration-only		Finish-only		Progress	
Milestone		Inactive Milestone		Manual Summary Rollup		External Tasks		Manual Progress	
Summary		Inactive Summary		Manual Summary		External Milestone			

Schedule 4- ECM Work Schedule of Values

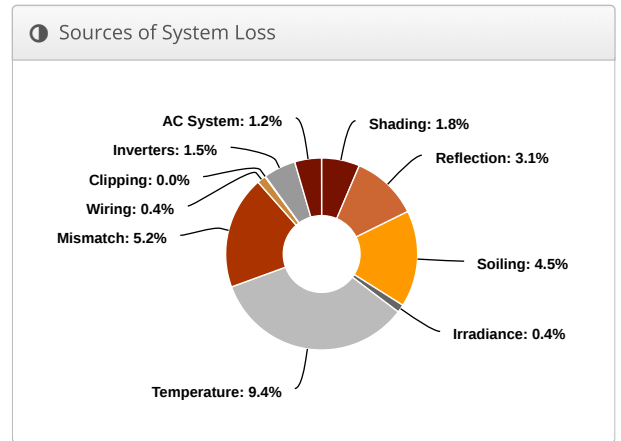
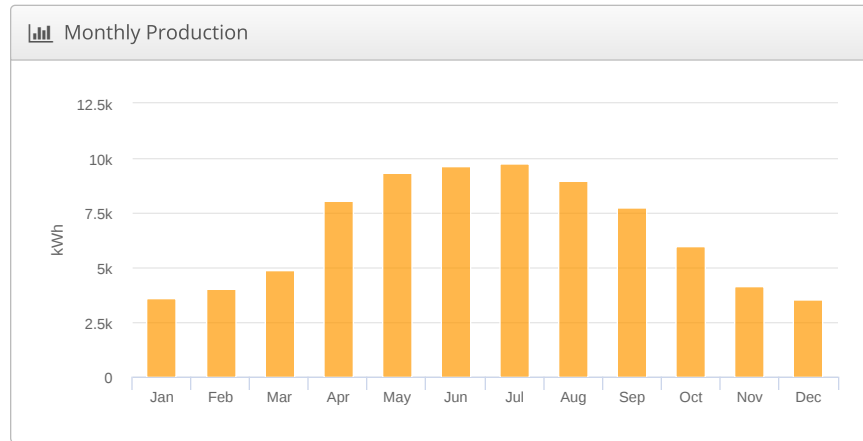
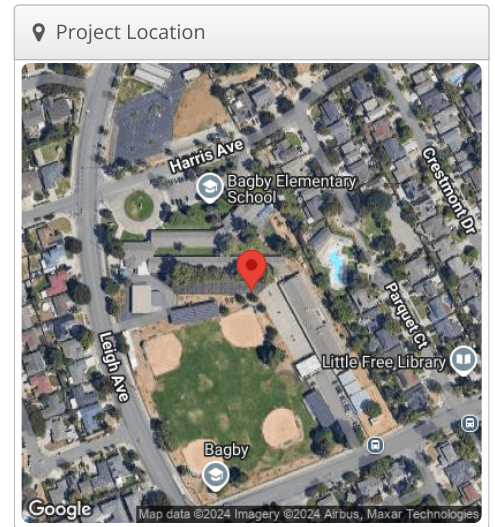
Task Description	Cost
Mobilization	\$77,616
Design, Submittals, Permitting	\$388,297
Material Order/ Delivery	\$445,195
Installation	\$1,304,351
Closeout	\$45,212
Total Cost	\$2,260,671

Schedule 5-Solar PV Helioscope Models

(RT BVT550) CSD BAGBY 11.15.24 Cambrian SD Bagby, 1840 Harris Ave, San Jose, CA 95124

Report	
Project Name	Cambrian SD Bagby
Project Address	1840 Harris Ave, San Jose, CA 95124
Prepared By	Sneha Sriwastava sneha.sriwastava@centrica.com

System Metrics	
Design	(RT BVT550) CSD BAGBY 11.15.24
Module DC Nameplate	55.6 kW
Inverter AC Nameplate	50.0 kW Load Ratio: 1.11
Annual Production	79.58 MWh
Performance Ratio	75.4%
kWh/kWp	1,432.5
Weather Dataset	TMY, SAN JOSE INTL AP, NSRDB (tmy3, II)
Simulator Version	d4d46e467c-aa12056117-0f16a8b762-98be4a3938



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,810.2	
	POA Irradiance	1,898.8	4.9%
	Shaded Irradiance	1,865.2	-1.8%
	Irradiance after Reflection	1,807.2	-3.1%
	Irradiance after Soiling	1,726.2	-4.5%
	Total Collector Irradiance	1,726.9	0.0%
Energy (kWh)	Nameplate	96,061.0	
	Output at Irradiance Levels	95,707.6	-0.4%
	Output at Cell Temperature Derate	86,708.0	-9.4%
	Output After Mismatch	82,163.8	-5.2%
	Optimal DC Output	81,832.1	-0.4%
	Constrained DC Output	81,809.6	0.0%
	Inverter Output	80,582.5	-1.5%
	Energy to Grid	79,577.6	-1.2%
Temperature Metrics			
	Avg. Operating Ambient Temp		17.5 °C
	Avg. Operating Cell Temp		37.2 °C
Simulation Metrics			
	Operating Hours		4347
	Solved Hours		4347

☁ Condition Set												
Description	CBS STANDARD											
Weather Dataset	TMY, SAN JOSE INTL AP, NSRDB (tmy3, II)											
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
	3	3	3	3	6	6	6	6	3	3	3	3
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	2.00%											
Trackers	Maximum Angle						Backtracking					
	60°						Enabled					
Module Characterizations	Module						Uploaded By		Characterization			
	BVM7612M-550-H-HC-BF-DG (1000V) (2023) (Boviet Solar)						HelioScope		Spec Sheet Characterization, PAN			
Component Characterizations	Device						Uploaded By		Characterization			
	CPS SCA25KTL-DO/US-208 (2020) (CPS)						HelioScope		Spec Sheet			
	CPS SCA50KTL-DO/US-480 (Jul21) (Chint Power Systems)						HelioScope		Spec Sheet			

📦 Components		
Component	Name	Count
Inverters	CPS SCA50KTL-DO/US-480 (Jul21) (Chint Power Systems)	1 (50.0 kW)
AC Panels	1 input AC Panel	1
AC Home Runs	3/0 AWG (Aluminum)	1 (72.4 ft)
AC Home Runs	250 MCM (Aluminum)	1 (2,818.6 ft)
Strings	10 AWG (Copper)	7 (1,099.3 ft)
Module	Boviet Solar, BVM7612M-550-H-HC-BF-DG (1000V) (2023) (550W)	101 (55.6 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	12-18	Along Racking
Wiring Zone 2	-	12-18	Along Racking

🏗 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Flush Mount	Portrait (Vertical)	16.121374°	241.44958°	0.1 ft	1x1	101	101	55.6 kW
Field Segment 2	Flush Mount	Portrait (Vertical)	22.62°	179.85449°	0.1 ft	1x1			0

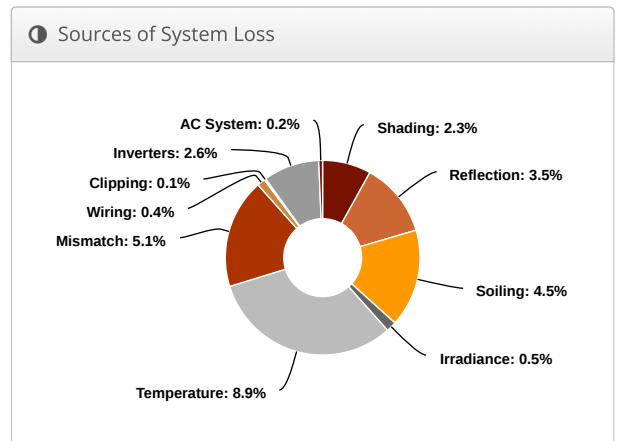
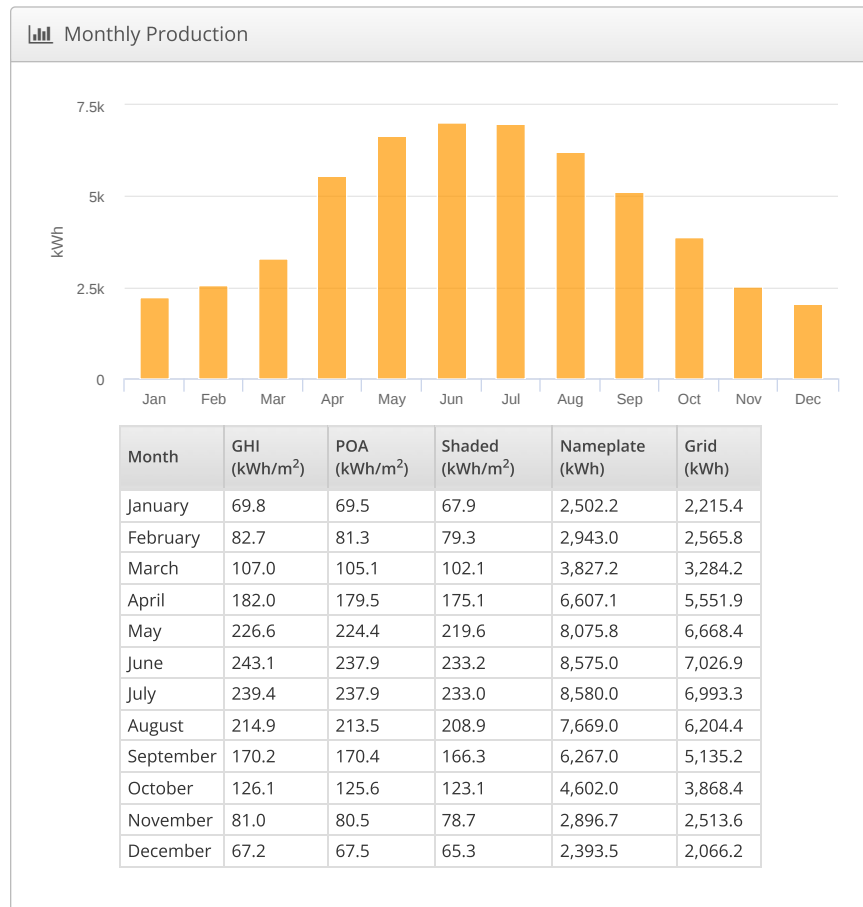
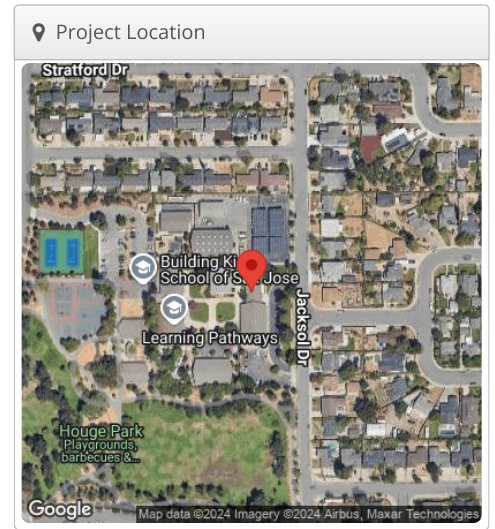
📍 Detailed Layout2



(RT BVT550) CSD DISTRICT OFFICE (11.4.24) Cambrian SD District Office, 4115 Jacksol Dr Building 2, San Jose, CA 95124

Report	
Project Name	Cambrian SD District Office
Project Address	4115 Jacksol Dr Building 2, San Jose, CA 95124
Prepared By	Sneha Sriwastava sneha.sriwastava@centrica.com

System Metrics	
Design	(RT BVT550) CSD DISTRICT OFFICE (11.4.24)
Module DC Nameplate	40.2 kW
Inverter AC Nameplate	36.0 kW Load Ratio: 1.12
Annual Production	54.09 MWh
Performance Ratio	75.1%
kWh/kWp	1,347.3
Weather Dataset	TMY, SAN JOSE INTL AP, NSRDB (tmy3, I1)
Simulator Version	947d57432b-643e1b838d-5eadff0575-e62abbc635



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,810.2	
	POA Irradiance	1,793.1	-0.9%
	Shaded Irradiance	1,752.6	-2.3%
	Irradiance after Reflection	1,692.1	-3.5%
	Irradiance after Soiling	1,615.2	-4.5%
	Total Collector Irradiance	1,615.3	0.0%
Energy (kWh)	Nameplate	64,938.5	
	Output at Irradiance Levels	64,631.4	-0.5%
	Output at Cell Temperature Derate	58,885.2	-8.9%
	Output After Mismatch	55,885.8	-5.1%
	Optimal DC Output	55,680.4	-0.4%
	Constrained DC Output	55,637.4	-0.1%
	Inverter Output	54,190.8	-2.6%
	Energy to Grid	54,093.8	-0.2%
Temperature Metrics			
	Avg. Operating Ambient Temp		17.5 °C
	Avg. Operating Cell Temp		35.9 °C
Simulation Metrics			
	Operating Hours		4347
	Solved Hours		4347

☁ Condition Set												
Description		CBS standard										
Weather Dataset		TMY, SAN JOSE INTL AP, NSRDB (tmy3, II)										
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
	3	3	3	3	6	6	6	6	3	3	3	3
Irradiation Variance		5%										
Cell Temperature Spread		4° C										
Module Binning Range		-2.5% to 2.5%										
AC System Derate		2.00%										
Trackers	Maximum Angle						Backtracking					
	60°						Enabled					
Module Characterizations	Module						Uploaded By		Characterization			
	BVM7612M-550-H-HC-BF-DG (1000V) (2023) (Boviet Solar)						HelioScope		Spec Sheet Characterization, PAN			
Component Characterizations	Device						Uploaded By		Characterization			
	CPS SCA36KTL-DO/US-480 (2023) (CPS)						HelioScope		Spec Sheet			

📦 Components		
Component	Name	Count
Inverters	CPS SCA36KTL-DO/US-480 (2023) (CPS)	1 (36.0 kW)
AC Panels	1 input AC Panel	1
AC Home Runs	3/0 AWG (Aluminum)	1 (34.6 ft)
AC Home Runs	250 MCM (Aluminum)	1 (572.3 ft)
Strings	10 AWG (Copper)	5 (647.1 ft)
Module	Boviet Solar, BVM7612M-550-H-HC-BF-DG (1000V) (2023) (550W)	73 (40.2 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	10-18	Along Racking

🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Flush Mount	Portrait (Vertical)	16.332853°	270°	0.1 ft	1x1	73	73	40.2 kW

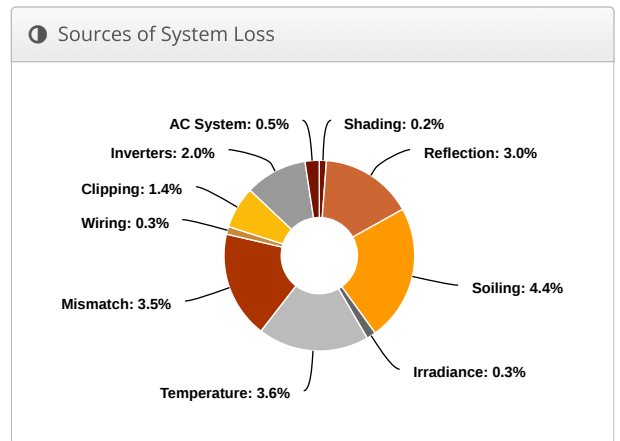
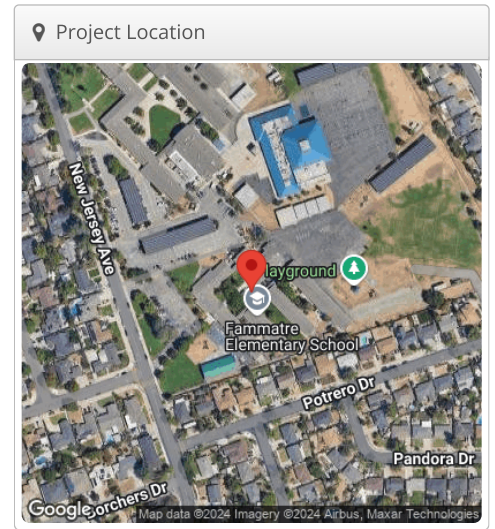
Detailed Layout



(RT BVM550) CSD FAMMATRE (11.13.24) Cambrian SD Fammatre School, 2800 New Jersey Ave, San Jose, CA 95124

Report	
Project Name	Cambrian SD Fammatre School
Project Address	2800 New Jersey Ave, San Jose, CA 95124
Prepared By	Sneha Sriwastava sneha.sriwastava@centrica.com

System Metrics	
Design	(RT BVM550) CSD FAMMATRE (11.13.24)
Module DC Nameplate	66.0 kW
Inverter AC Nameplate	50.0 kW Load Ratio: 1.32
Annual Production	106.2 MWh
Performance Ratio	82.4%
kWh/kWp	1,608.7
Weather Dataset	TMY, SAN JOSE INTL AP, NSRDB (tmy3, I1)
Simulator Version	2ca4d0df47-1747616d07-3bfb33f9a-fb35cdfaf62



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,810.2	
	POA Irradiance	1,953.1	7.9%
	Shaded Irradiance	1,948.6	-0.2%
	Irradiance after Reflection	1,889.7	-3.0%
	Irradiance after Soiling	1,805.6	-4.4%
	Total Collector Irradiance	1,805.6	0.0%
Energy (kWh)	Nameplate	119,340.0	
	Output at Irradiance Levels	118,979.7	-0.3%
	Output at Cell Temperature Derate	114,664.7	-3.6%
	Output After Mismatch	110,662.1	-3.5%
	Optimal DC Output	110,385.0	-0.3%
	Constrained DC Output	108,874.9	-1.4%
	Inverter Output	106,667.3	-2.0%
		Energy to Grid	106,174.3
Temperature Metrics			
	Avg. Operating Ambient Temp		17.5 °C
	Avg. Operating Cell Temp		27.4 °C
Simulation Metrics			
	Operating Hours		4347
	Solved Hours		4347

☁ Condition Set												
Description		Condition Set 1										
Weather Dataset		TMY, SAN JOSE INTL AP, NSRDB (tmy3, II)										
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
	3	3	3	3	6	6	6	6	3	3	3	3
Irradiation Variance		5%										
Cell Temperature Spread		4° C										
Module Binning Range		-2.5% to 2.5%										
AC System Derate		2.50%										
Trackers	Maximum Angle					Backtracking						
	60°					Enabled						
Module Characterizations	Module					Uploaded By			Characterization			
	BVM7612M-550-H-HC-BF-DG (1500V) (2023) (Boviet Solar)					HelioScope			Spec Sheet Characterization, PAN			
Component Characterizations	Device					Uploaded By			Characterization			
	CPS SCA25KTL-DO-R/US-480 (Chint Power)					HelioScope			Spec Sheet			

📦 Components		
Component	Name	Count
Inverters	CPS SCA25KTL-DO-R/US-480 (Chint Power)	2 (50.0 kW)
Transformer	Primary Side: 208Y/120V, Secondary: 480Y/277V	2
AC Panels	1 input AC Panel	2
AC Home Runs	2 AWG (Aluminum)	2 (1,801.7 ft)
Strings	10 AWG (Copper)	8 (573.6 ft)
Module	Boviet Solar, BVM7612M-550-H-HC-BF-DG (1500V) (2023) (550W)	120 (66.0 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	14-18	Along Racking
Wiring Zone 2	-	14-18	Along Racking

🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Caport 2	Carport	Landscape (Horizontal)	7°	249.44395°	0.1 ft	1x1			0
Carport 1	Carport	Landscape (Horizontal)	7°	248.04079°	0.1 ft	1x1			0
Field Segment 3	Carport	Landscape (Horizontal)	7°	225.80693°	0.1 ft	1x1			0
Field Segment 4	Carport	Landscape (Horizontal)	7°	225.80693°	0.1 ft	1x1			0
Field Segment 5	Carport	Portrait (Vertical)	18°	225.80693°	0.1 ft	1x1	60	60	33.0 kW
Field Segment 5 (copy)	Carport	Portrait (Vertical)	18°	225.80693°	0.1 ft	1x1	60	60	33.0 kW

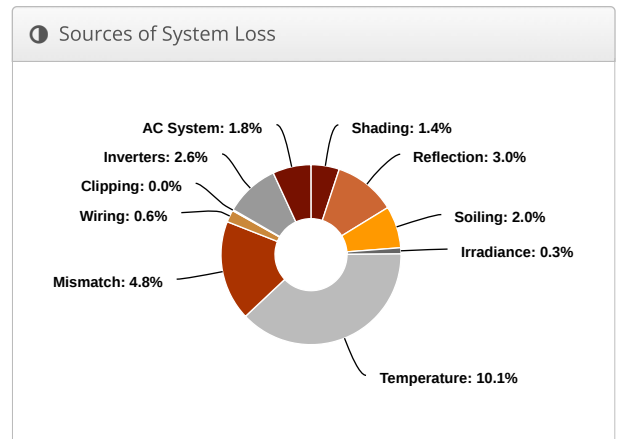
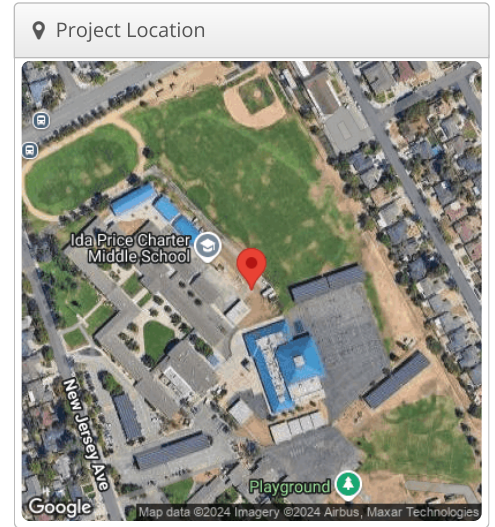
📍 Detailed Layout2



(RT BVM550) CSD IDA PRICE (11.15.24) Cambrian SD Ida Price, 2650 New Jersey Ave, San Jose, CA 95124

Report	
Project Name	Cambrian SD Ida Price
Project Address	2650 New Jersey Ave, San Jose, CA 95124
Prepared By	Sneha Sriwastava sneha.sriwastava@centrica.com

System Metrics	
Design	(RT BVM550) CSD IDA PRICE (11.15.24)
Module DC Nameplate	85.8 kW
Inverter AC Nameplate	72.0 kW Load Ratio: 1.19
Annual Production	133.9 MWh
Performance Ratio	76.1%
kWh/kWp	1,560.2
Weather Dataset	TMY, 10km grid (37.25,-121.95), NREL (prospector)
Simulator Version	d4d46e467c-aa12056117-0f16a8b762-98be4a3938



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,906.2	
	POA Irradiance	2,049.0	7.5%
	Shaded Irradiance	2,021.2	-1.4%
	Irradiance after Reflection	1,961.2	-3.0%
	Irradiance after Soiling	1,922.0	-2.0%
	Total Collector Irradiance	1,922.1	0.0%
Energy (kWh)	Nameplate	165,151.1	
	Output at Irradiance Levels	164,667.1	-0.3%
	Output at Cell Temperature Derate	147,963.7	-10.1%
	Output After Mismatch	140,888.4	-4.8%
	Optimal DC Output	140,068.3	-0.6%
	Constrained DC Output	139,999.5	0.0%
	Inverter Output	136,357.9	-2.6%
		Energy to Grid	133,861.4
Temperature Metrics			
	Avg. Operating Ambient Temp		15.9 °C
	Avg. Operating Cell Temp		36.8 °C
Simulation Metrics			
	Operating Hours		4662
	Solved Hours		4662

☁ Condition Set												
Description		Condition Set 1										
Weather Dataset		TMY, 10km grid (37.25,-121.95), NREL (prospector)										
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
	2	2	2	2	2	2	2	2	2	2	2	2
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 Characterizations	Module				Uploaded By		Characterization					
	Q.PEAK DUO XL-G11.3/BFG 585 (Hanwha Q Cells)				HelioScope		Spec Sheet Characterization, PAN					
	BVM7612M-550-H-HC-BF-DG (1500V) (2023) (Boviet Solar)				HelioScope		Spec Sheet Characterization, PAN					
Component Characterizations	Device				Uploaded By		Characterization					
	CPS SCA60KTL-DO/US-480 (Jul21) (Chint Power Systems)				HelioScope		Spec Sheet					
	CPS SCA36KTL-DO/US-480 (2023) (CPS)				HelioScope		Spec Sheet					

📦 Components		
Component	Name	Count
Inverters	CPS SCA36KTL-DO/US-480 (2023) (CPS)	2 (72.0 kW)
AC Panels	1 input AC Panel	2
AC Home Runs	12 AWG (Copper)	1 (142.3 ft)
AC Home Runs	10 AWG (Copper)	1 (460.5 ft)
AC Home Runs	3/0 AWG (Aluminum)	2 (57.5 ft)
Strings	10 AWG (Copper)	9 (1,393.8 ft)
Module	Boviet Solar, BVM7612M-550-H-HC-BF-DG (1500V) (2023) (550W)	156 (85.8 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	-	Along Racking
Wiring Zone 2	-	10-18	Along Racking
Wiring Zone 3	-	10-18	Along Racking

🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Flush Mount	Landscape (Horizontal)	16°	226.0627°	0.1 ft	1x1	42	42	23.1 kW
Field Segment 2	Flush Mount	Landscape (Horizontal)	16°	226.0488°	0.1 ft	1x1	42	42	23.1 kW
Field Segment 3	Carport	Portrait (Vertical)	7°	250.24135°	0.1 ft	1x1			0
Field Segment 2 (copy)	Flush Mount	Landscape (Horizontal)	16°	226.0488°	0.1 ft	1x2	36	72	39.6 kW

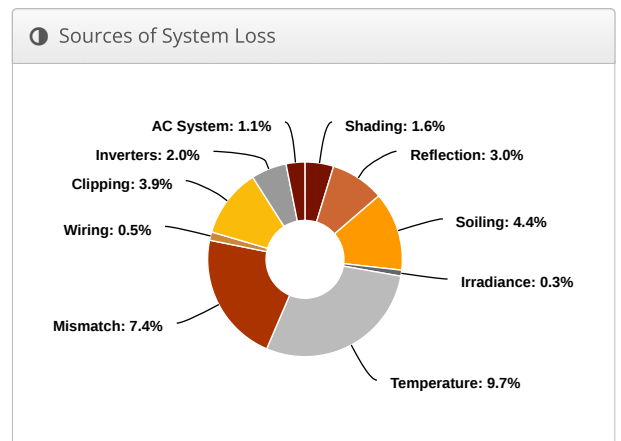
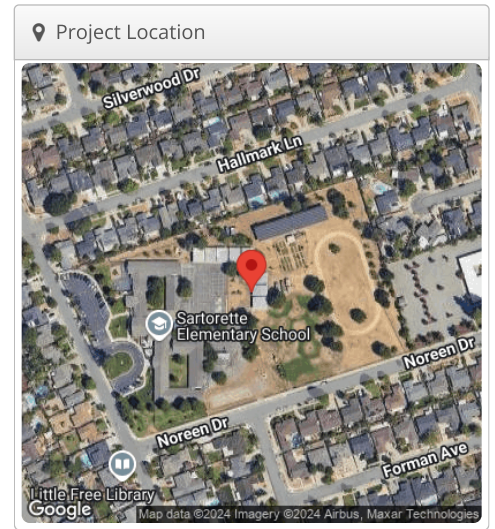
📍 Detailed Layout2



(RT BVT550) CAMBRIAN SD SARTORETTE(11.4.24) Cambrian SD Sartoretete, 3850 Woodford Dr, San Jose, CA 95124

Report	
Project Name	Cambrian SD Sartoretete
Project Address	3850 Woodford Dr, San Jose, CA 95124
Prepared By	Sneha Sriwastava sneha.sriwastava@centrica.com

System Metrics	
Design	(RT BVT550) CAMBRIAN SD SARTORETTE(11.4.24)
Module DC Nameplate	77.0 kW
Inverter AC Nameplate	75.0 kW Load Ratio: 1.03
Annual Production	105.5 MWh
Performance Ratio	70.6%
kWh/kWp	1,369.9
Weather Dataset	TMY, SAN JOSE INTL AP, NSRDB (tmy3, II)
Simulator Version	947d57432b-643e1b838d-5eadff0575-e62abbc635



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,810.2	
	POA Irradiance	1,941.3	7.2%
	Shaded Irradiance	1,909.9	-1.6%
	Irradiance after Reflection	1,851.9	-3.0%
	Irradiance after Soiling	1,769.6	-4.4%
	Total Collector Irradiance	1,769.7	0.0%
Energy (kWh)	Nameplate	136,467.5	
	Output at Irradiance Levels	136,003.7	-0.3%
	Output at Cell Temperature Derate	122,767.5	-9.7%
	Output After Mismatch	113,717.7	-7.4%
	Optimal DC Output	113,185.1	-0.5%
	Constrained DC Output	108,787.8	-3.9%
	Inverter Output	106,612.0	-2.0%
		Energy to Grid	105,482.2
Temperature Metrics			
	Avg. Operating Ambient Temp		17.5 °C
	Avg. Operating Cell Temp		37.9 °C
Simulation Metrics			
	Operating Hours		4347
	Solved Hours		4347

☁ Condition Set												
Description	Condition Set 1											
Weather Dataset	TMY, SAN JOSE INTL AP, NSRDB (tmy3, II)											
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
	3	3	3	3	6	6	6	6	3	3	3	3
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	2.00%											
Trackers	Maximum Angle					Backtracking						
	60°					Enabled						
Module Characterizations	Module					Uploaded By		Characterization				
	BVM7612M-550-H-HC-BF-DG (1000V) (2023) (Boviet Solar)					HelioScope		Spec Sheet Characterization, PAN				
Component Characterizations	Device					Uploaded By		Characterization				
	CPS SCA25KTL-DO-R/US-480 (Chint Power)					HelioScope		Spec Sheet				

📦 Components		
Component	Name	Count
Inverters	CPS SCA25KTL-DO-R/US-480 (Chint Power)	3 (75.0 kW)
AC Panels	3 input AC Panel	1
AC Home Runs	4/0 AWG (Aluminum)	1 (1,591.5 ft)
AC Home Runs	3/0 AWG (Aluminum)	3 (873.4 ft)
Strings	10 AWG (Copper)	9 (973.4 ft)
Module	Boviet Solar, BVM7612M-550-H-HC-BF-DG (1000V) (2023) (550W)	140 (77.0 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	14-18	Along Racking

🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 2	Flush Mount	Portrait (Vertical)	20.504398°	180°	0.1 ft	1x1	51	51	28.1 kW
Field Segment 2	Flush Mount	Landscape (Horizontal)	20.504398°	270.3661°	0.1 ft	1x1	19	19	10.5 kW
Field Segment 2 (copy)	Flush Mount	Landscape (Horizontal)	20.504398°	270.3661°	0.1 ft	1x1	30	30	16.5 kW
Field Segment 4	Flush Mount	Landscape (Horizontal)	20.504398°	180.22557°	0.1 ft	1x1	40	40	22.0 kW

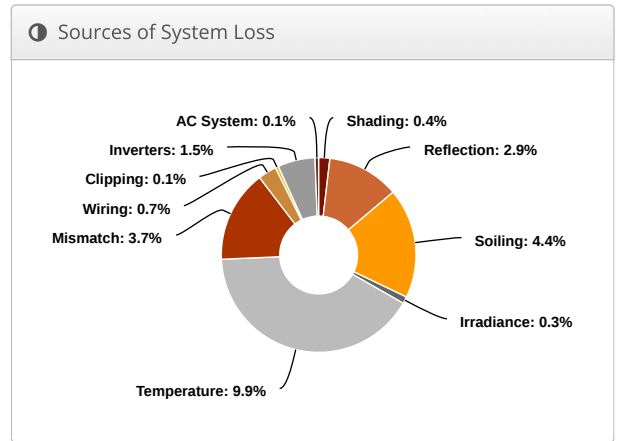
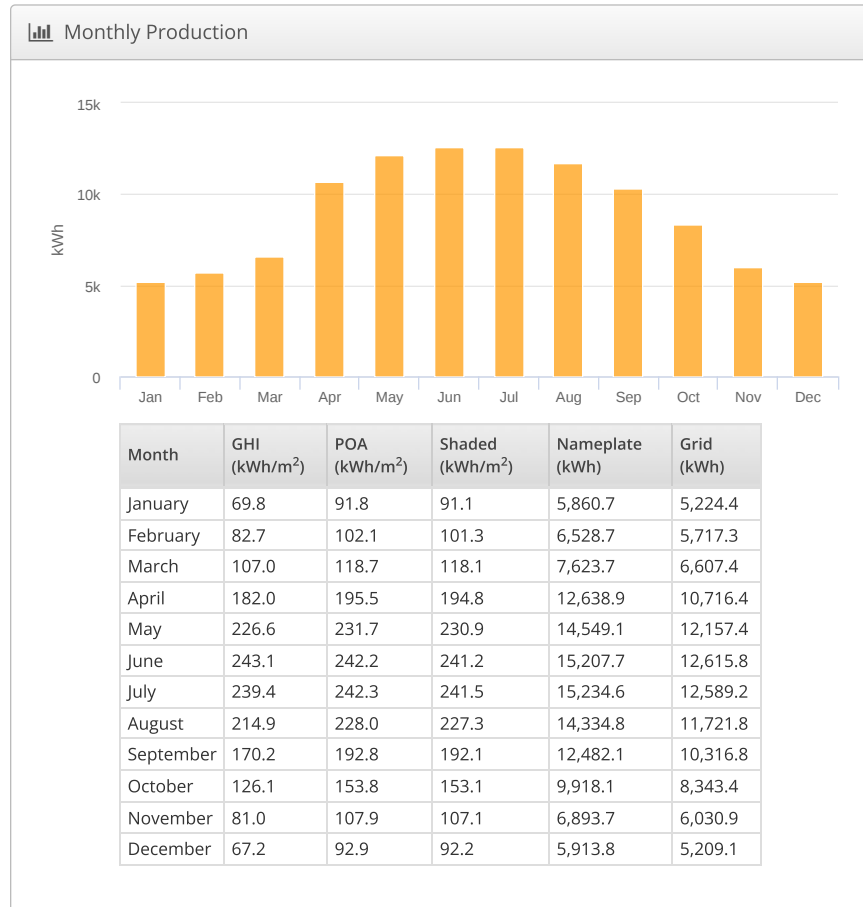
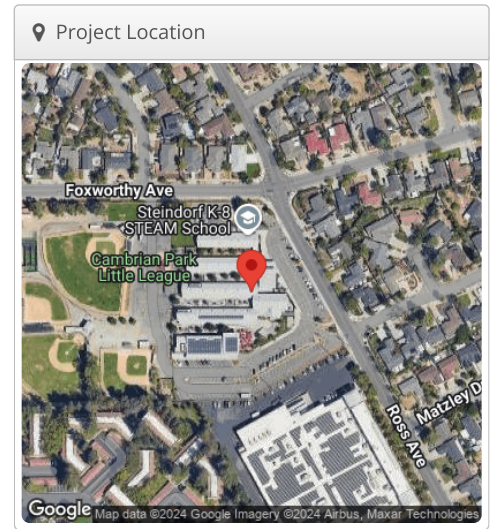
📍 Detailed Layout



(RT BVM550) CSD Steindorf Steam (11.13.24) Cambrian SD Steindorf Steam (3.23.23), 3001 Ross Ave, San Jose, CA 95124

Report	
Project Name	Cambrian SD Steindorf Steam (3.23.23)
Project Address	3001 Ross Ave, San Jose, CA 95124
Prepared By	Sneha Sriwastava sneha.sriwastava@centrica.com

System Metrics	
Design	(RT BVM550) CSD Steindorf Steam (11.13.24)
Module DC Nameplate	68.8 kW
Inverter AC Nameplate	60.0 kW Load Ratio: 1.15
Annual Production	107.2 MWh
Performance Ratio	78.0%
kWh/kWp	1,560.0
Weather Dataset	TMY, SAN JOSE INTL AP, NSRDB (tmy3, II)
Simulator Version	2ca4d0df47-1747616d07-3bfb33f9a-fb35cdfaf62



⚡ Annual Production			
	Description	Output	% Delta
Irradiance (kWh/m ²)	Annual Global Horizontal Irradiance	1,810.2	
	POA Irradiance	1,999.6	10.5%
	Shaded Irradiance	1,990.6	-0.4%
	Irradiance after Reflection	1,932.9	-2.9%
	Irradiance after Soiling	1,847.4	-4.4%
	Total Collector Irradiance	1,847.5	0.0%
Energy (kWh)	Nameplate	127,185.9	
	Output at Irradiance Levels	126,832.6	-0.3%
	Output at Cell Temperature Derate	114,228.3	-9.9%
	Output After Mismatch	109,989.1	-3.7%
	Optimal DC Output	109,179.6	-0.7%
	Constrained DC Output	109,039.0	-0.1%
	Inverter Output	107,403.4	-1.5%
		Energy to Grid	107,249.9
Temperature Metrics			
	Avg. Operating Ambient Temp		17.5 °C
	Avg. Operating Cell Temp		38.9 °C
Simulation Metrics			
	Operating Hours		4347
	Solved Hours		4347

☁ Condition Set												
Description	CBS STANDARD											
Weather Dataset	TMY, SAN JOSE INTL AP, NSRDB (tmy3, II)											
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
	3	3	3	3	6	6	6	6	3	3	3	3
Irradiation Variance	5%											
Cell Temperature Spread	4° C											
Module Binning Range	-2.5% to 2.5%											
AC System Derate	2.00%											
Trackers	Maximum Angle						Backtracking					
	60°						Enabled					
Module Characterizations	Module				Uploaded By		Characterization					
	Q.PEAK DUO XL-G11.3/BFG 585 (Hanwha Q Cells)				HelioScope		Spec Sheet Characterization, PAN					
	BVM7612M-550-H-HC-BF-DG (1500V) (2023) (Boviet Solar)				HelioScope		Spec Sheet Characterization, PAN					
Component Characterizations	Device				Uploaded By		Characterization					
	CPS SCA60KTL-DO/US-480 (Jul21) (Chint Power Systems)				HelioScope		Spec Sheet					

📦 Components		
Component	Name	Count
Inverters	CPS SCA60KTL-DO/US-480 (Jul21) (Chint Power Systems)	1 (60.0 kW)
AC Panels	1 input AC Panel	1
AC Home Runs	4/0 AWG (Aluminum)	1 (102.3 ft)
AC Home Runs	3/0 AWG (Aluminum)	1 (194.4 ft)
Strings	10 AWG (Copper)	8 (2,241.8 ft)
Module	Boviet Solar, BVM7612M-550-H-HC-BF-DG (1500V) (2023) (550W)	125 (68.8 kW)

🔌 Wiring Zones			
Description	Combiner Poles	String Size	Stringing Strategy
Wiring Zone	-	13-17	Along Racking
Wiring Zone 2	-	14-18	Along Racking

🏠 Field Segments									
Description	Racking	Orientation	Tilt	Azimuth	Intrarow Spacing	Frame Size	Frames	Modules	Power
Field Segment 1	Carport	Landscape (Horizontal)	7°	150.30614°	0.1 ft	1x1			0
Field Segment 2	Flush Mount	Landscape (Horizontal)	16°	180°	0.1 ft	1x1	101	101	55.6 kW
Field Segment 3	Flush Mount	Landscape (Horizontal)	16°	180°	0.1 ft	1x1	24	24	13.2 kW

📍 Detailed Layout2

