

Districtwide Solar Initiative: 5 Campuses



Clovis Community College



Board of Trustees March 7, 2017 Meeting

Christine Miktarian, AVC Business & Operations

Kevin Flanagan, SPURR

Brian Taylor, ForeFront



Process and Outreach

- August 2016 began discussions with Forefront/SPURR
- Board Meetings, Workshop – Discussions/Presentation
- FCC PAC, Classified Senate
- DW Classified Development Workshop
- Facilities Committees (DWFC, FCC, MOR, Clovis)
- January 2017 meeting with DO/Campus VPs relating to financials
- ASG Meetings (FCC & RC)
- Communications Council
- 15-Day Formal Notice – District Website, Postings at Campuses
- Neighborhood Emails, Calls, Meeting, Flyers
- Energize Fresno – Solar is a “complimentary” project
- March Meeting – Public Hearing and Board Action

Benefits Overview of Solar PPA

- **Financial Considerations**

- No upfront cost & fixed rate pricing – PERFORMED THRU A COMPETITIVE BID PROCESS, \$18.4 Million in savings throughout the 20-year PPA

- **Maintenance and Guaranteed Production included in PPA**

- **Educational component**

- **Charging Stations**

- **Shaded Parking**

- **LED lights under canopy**

- **Renewable Energy Certificates**

- **Environmental Considerations!**

- Reduction in Greenhouse Gas Emissions

Environmental Considerations

Site	System Size (kW)	System Production (kWh)	% Energy Offset	GHG Equiv. -Metric Tons CO ₂	GHG Equiv. -Passenger Vehicles driven/yr	CO ₂ Emissions Equiv. -Gals of gas consumed
Clovis	1,304	2,017,911	81%	1,418	300	159,575
Fresno	2,417	3,904,101	32%	2,744	580	308,733
Madera	869	1,371,345	83%	964	204	108,445
Reedley	2,717	4,248,233	80%	2,986	631	335,946
Herndon	135	232,549	80%	163	34.5	18,390
TOTAL	7,528	11,668,106	54%	8,275	1,750	931,089



SOME CUSTOMERS YOU MAY KNOW



CSU Bakersfield

FRESNO STATE

Discovery. Diversity. Distinction.



California State University
MONTEREY BAY

CALIFORNIA STATE UNIVERSITY
SAN BERNARDINO

CAL POLY

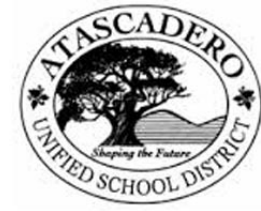
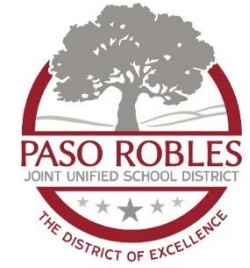
SAN LUIS OBISPO



UNIVERSITY OF CALIFORNIA
SANTA CRUZ



UCIrvine
University of California, Irvine



FOREFRONT
POWER

SPURR RFP WINNING PROVIDER

- **School Project for Utility Rate Reduction**

- Buying Consortium of 200+ USDs & CCDs
- Aggregated Procurement



- **Renewable Energy Aggregated Procurement (REAP)**

- Standardized Pre-vetted PPA Contract
- Standardized Pricing
- Standardized Terms

- **Signed Contracts with:**

- Tracy USD
- Dixon USD
- Paso Robles JUSD
- Atascadero USD
- Templeton USD
- Fairfax ESD
- Bakersfield CSD
- Newman Crows Landing USD
- City of San Diego
- City of Paso Robles

WHY SOLAR NOW?

- **Net Energy Metering 2.0 - 2016**
 - Allows System Sizes Larger than 1 MW
 - Retail Rate Compensation for Exported Energy
- **Federal Tax Credits Extended – 2016**
- **Time of Use Grandfathering – 2017**
 - Maximize Value of Solar
- **SPURR REAP RFP – Save Money, Time**
- **Continue Energy Efficiency Measures**
- **Compatible w Future Storage Solutions**
 - Allow for Storage Market Maturation



SCHOOLS POWER CURRICULUM

Schools Power



Renewable Energy Curriculum

Project-Based & Collaborative Learning

Units deepen students' higher level thinking skills while applying STEM skills.

Teaching Resources

Easily integrate curriculum into the classroom with teacher guides embedded conveniently in each lesson.

College and Career Skills Development

Lessons help students master a wide range of College and Career Readiness Skills within STEM topics.

Differentiation

Materials employ a range of learning modalities in multi-sensory formats for different learning styles.

Integrated Common Core Standards

Simply integrate into existing curriculum with Common Core & NGSS-based instruction.

Real World Context

Students use real world energy challenges as a learning context.



Mark Sontag,
Curriculum
Coordinator
Irvine USD



EV CHARGING STATIONS

- No upfront cost
- Installation Included
- Dual Wall Mount or Pedestal Mount
- Access Control
- Retractable Cords
- Revenue Collection Available



CARPORTS UP CLOSE

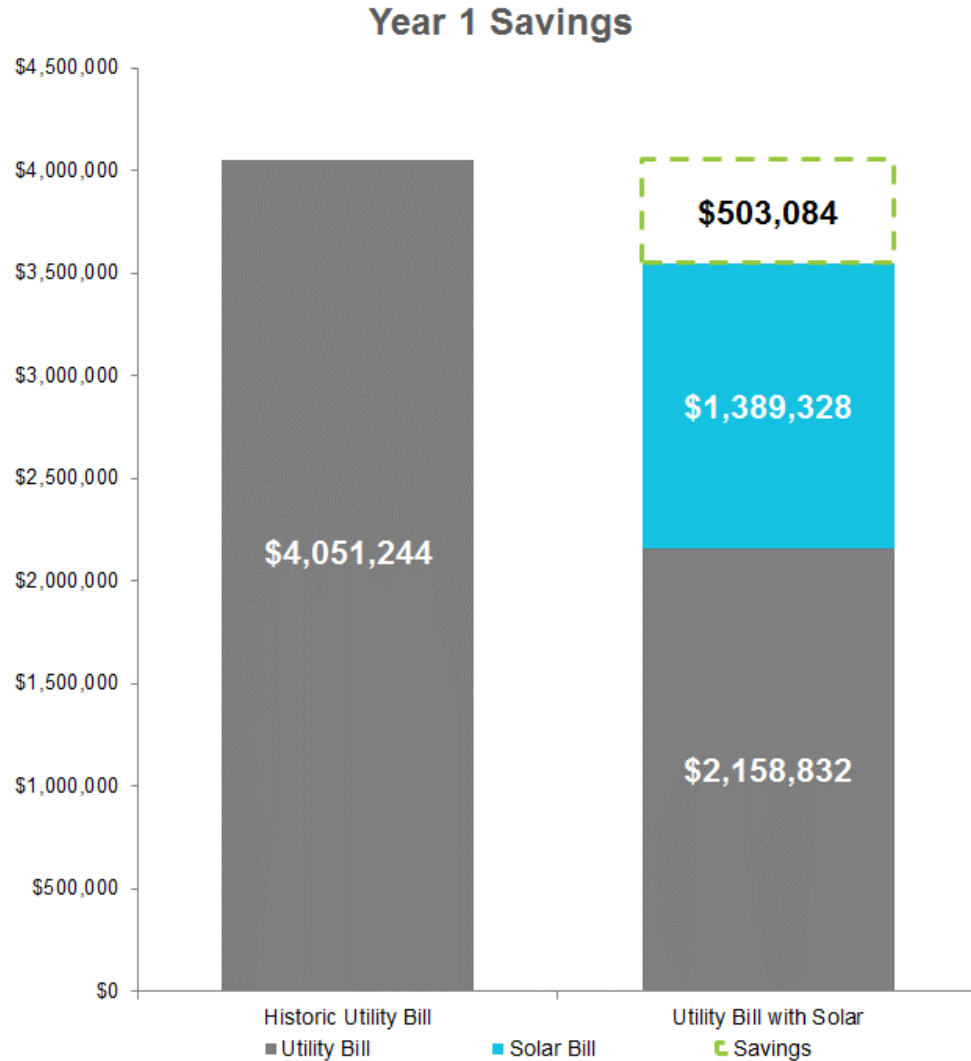


- Shade
- LED Light
- Security



SCCCD SOLAR STRATEGY

- District Savings
 - \$503K bill reduction in Year 1
 - \$18.3M savings over 20 years
- 5 Sites
 - Fresno City
 - Clovis
 - Madera
 - Reedley
 - Herndon
- DSA Pre-Checked Designs
- Fast Track & Detailed Study
- Timing: Summer / Fall 2017
- Flat 20-year rate

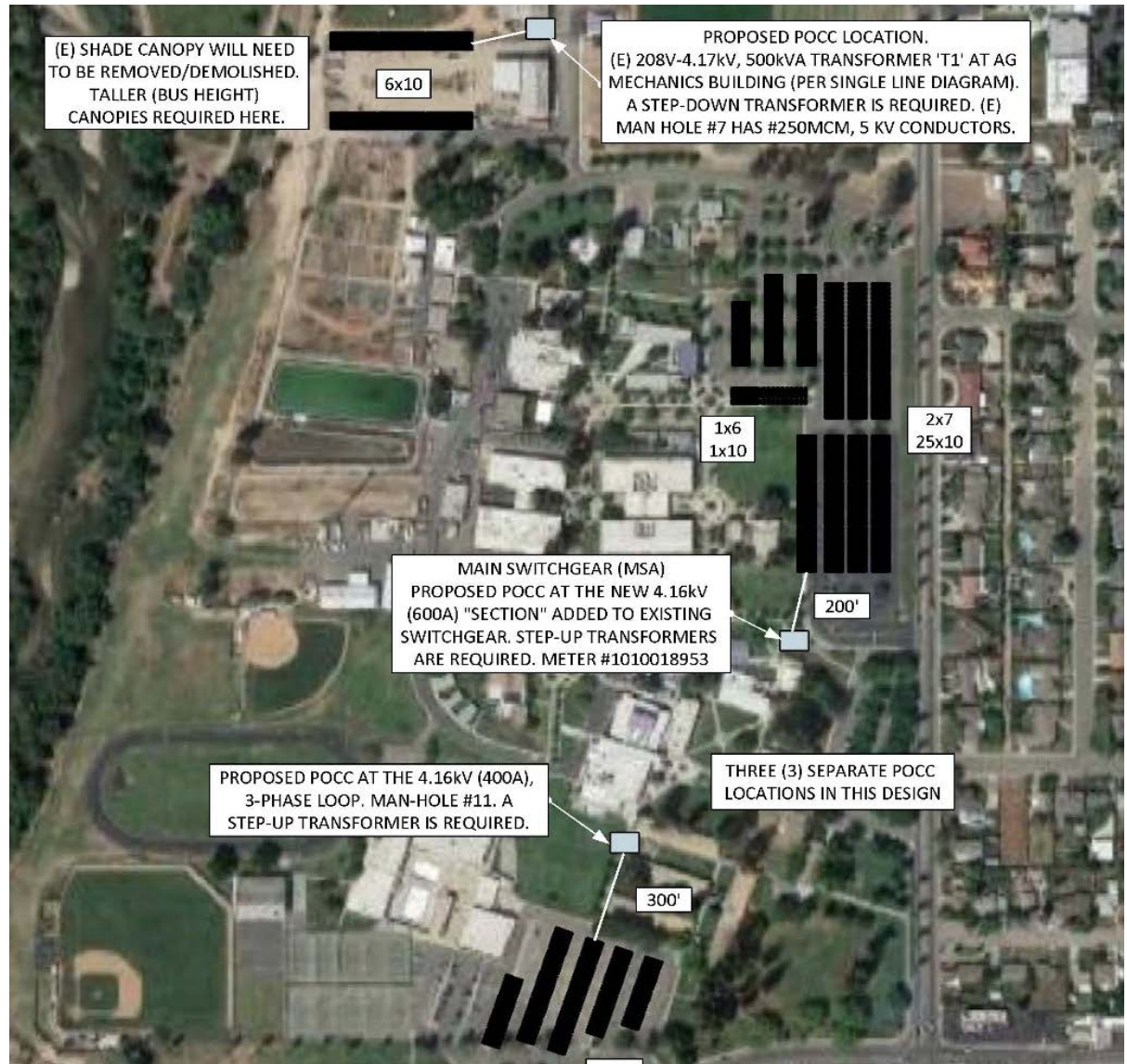


Assumes 3% Annual Utility Rate Increase



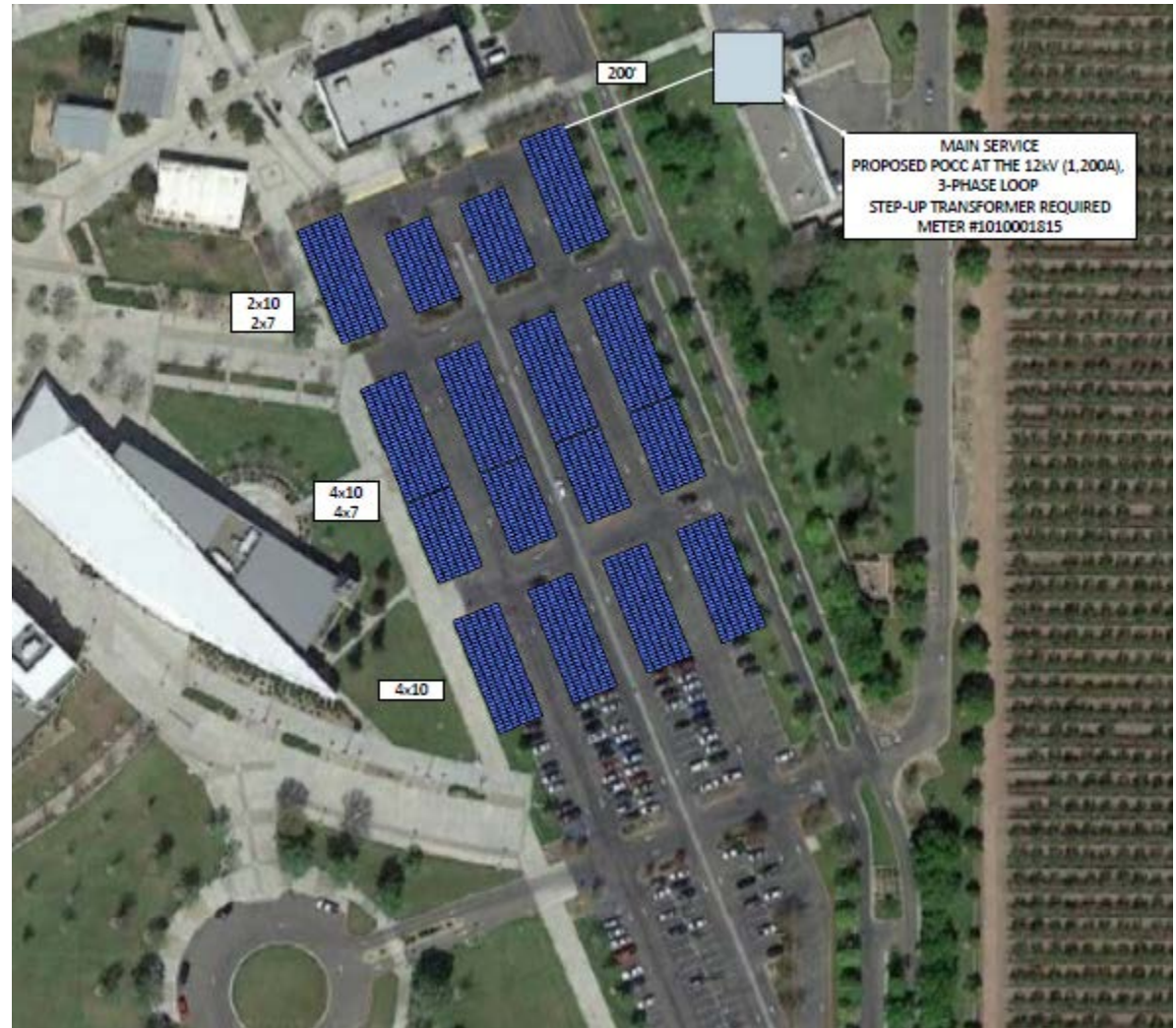
REEDLEY COLLEGE – 2,750 KW

- PPA Rate: \$0.1180
- Year 1 Savings: \$231,888
- 20 Year Savings: \$6,768,577
- System Production: 4,248,233 kwh
- 80% of RC's Consumption
- 4 Charging Stations

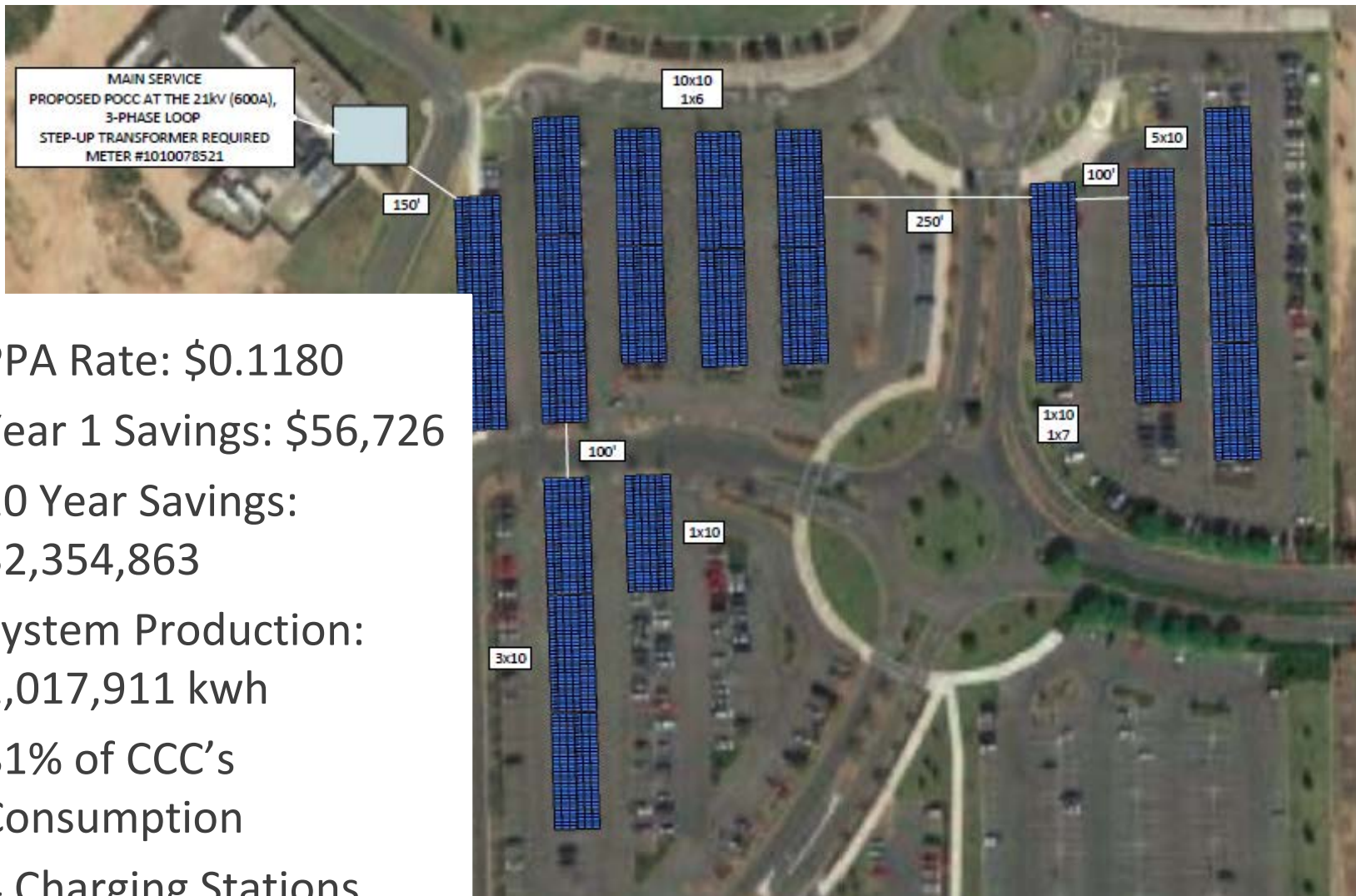


MADERA COMMUNITY COLLEGE CENTER – 869 KW

- PPA Rate: \$0.1210
- Year 1 Savings: \$73,795
- 20 Year Savings: \$2,481,805
- System Production: 1,371,345 kwh
- 83% of MCCC's Consumption
- 4 Charging Stations



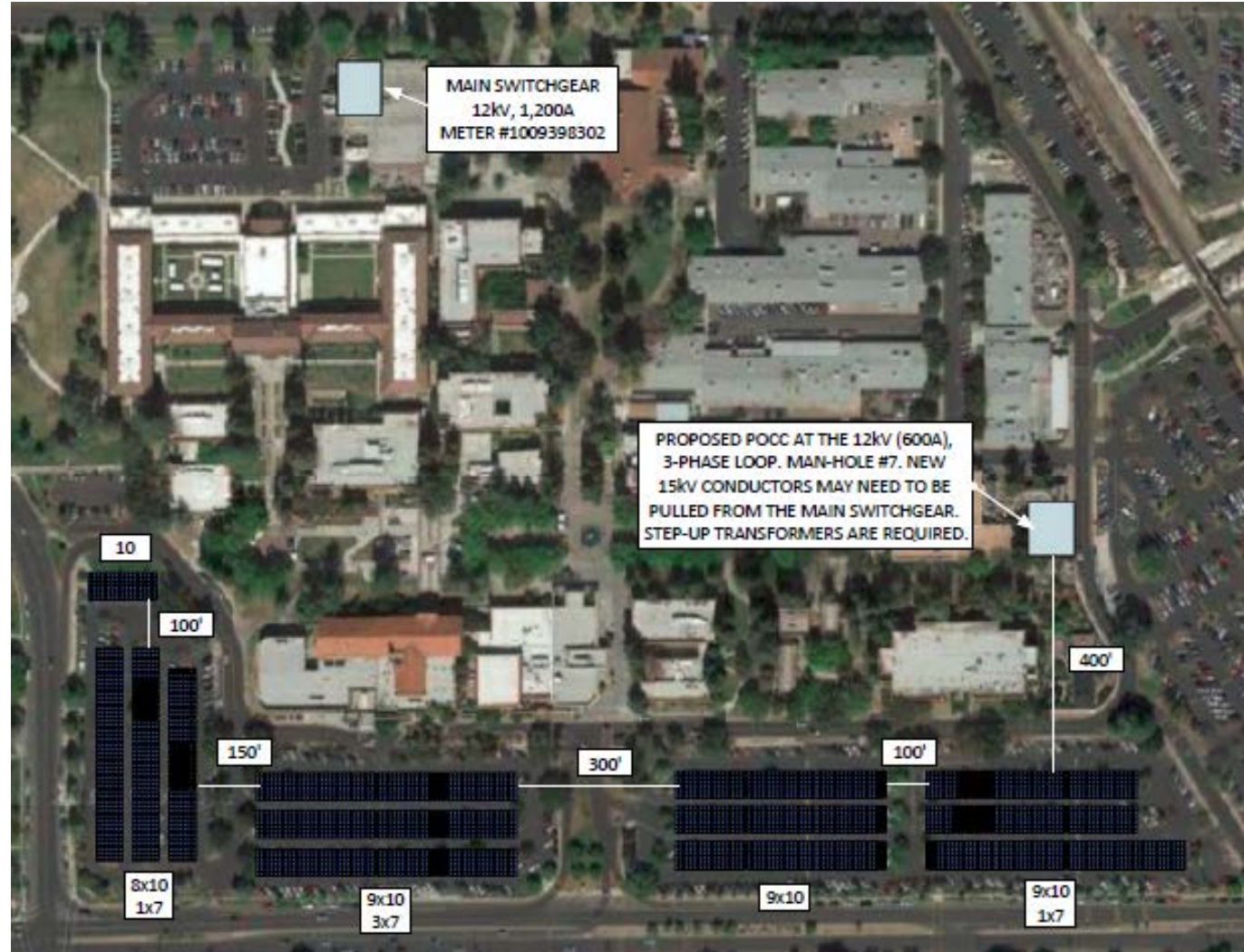
CLOVIS COMMUNITY COLLEGE – 1,304 KW



- PPA Rate: \$0.1180
- Year 1 Savings: \$56,726
- 20 Year Savings: \$2,354,863
- System Production: 2,017,911 kwh
- 81% of CCC's Consumption
- 4 Charging Stations

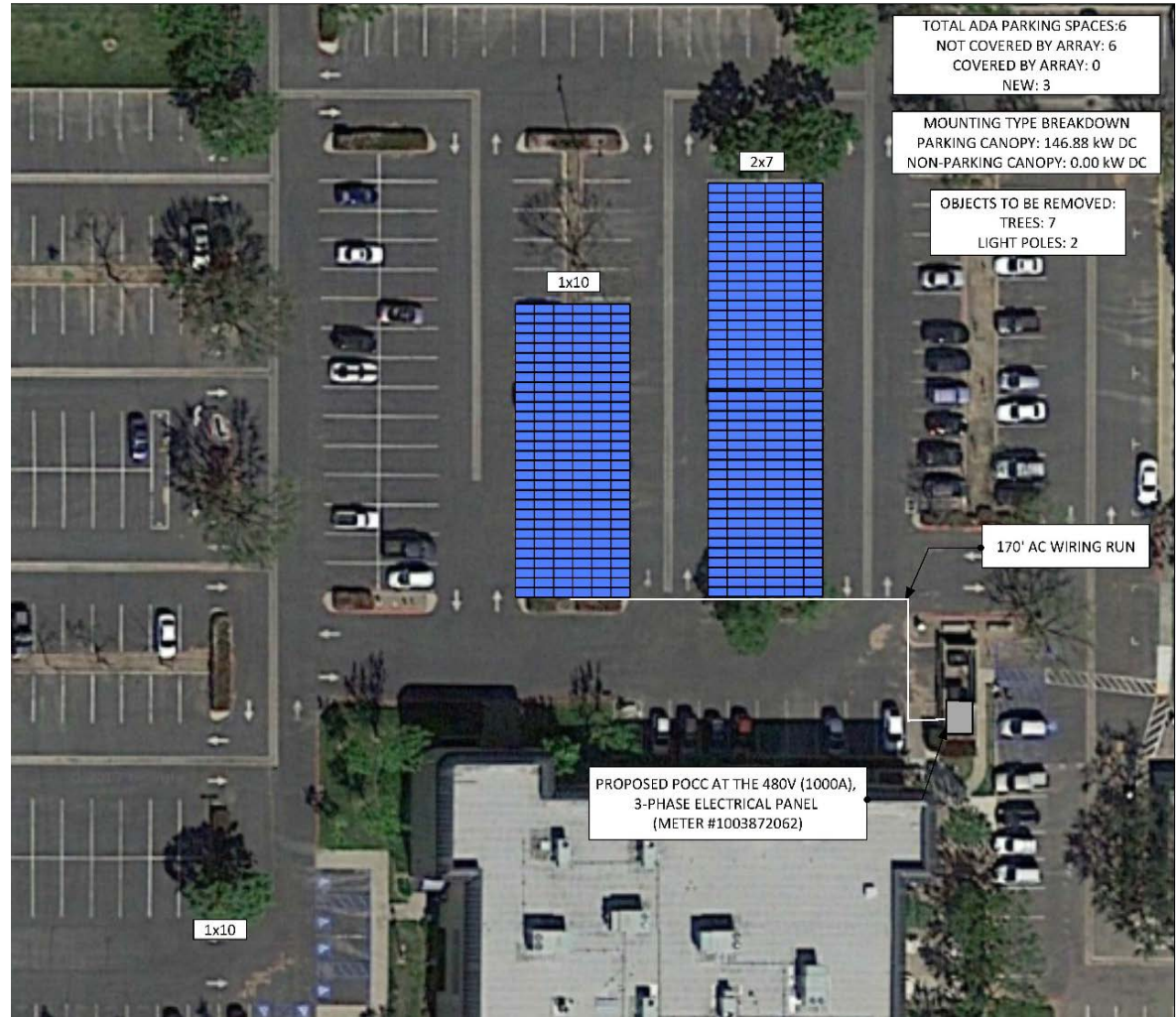
FRESNO CITY COLLEGE – 2,417 KW

- PPA Rate: \$0.1185
- Year 1 Savings: \$125,390
- 20 Year Savings: \$6,169,180
- System Production: 3,904,101 kwh
- 32% of FCC's Consumption
- 4 Charging Stations



HERNDON CAMPUS – 135 KW

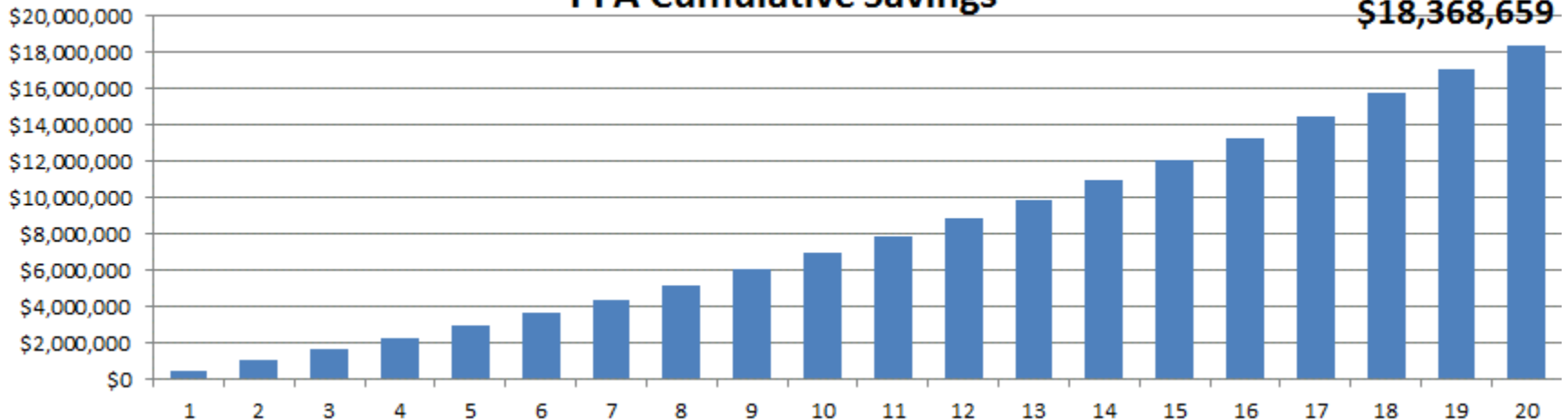
- PPA Rate: \$0.1460
- Year 1 Savings: \$15,285
- 20 Year Savings: \$594,235
- System Production: 232,549 kwh
- 80% of HC's Consumption
- 2 Charging stations



DISTRICT PRICING & SAVINGS

Site	PPA Rate	System Size (kW)	System Production (kWh)	% Energy Offset	Year 1 Savings	Year 1 Savings (%)	20 Year Savings
Clovis	\$0.1180	1,304	2,017,911	81%	\$56,726	12%	\$2,354,863
Fresno	\$0.1185	2,417	3,904,101	32%	\$125,390	7%	\$6,169,180
Madera	\$0.1210	869	1,371,345	83%	\$73,795	21%	\$2,481,805
Reedley	\$0.1180	2,717	4,248,233	80%	\$231,888	17%	\$6,768,577
Herndon	\$0.1460	135	232,549	80%	\$15,285	24%	\$594,235
TOTAL	\$0.1191	7,528	11,668,106	54%	\$503,084	12%	\$18,368,659

PPA Cumulative Savings



Assumes 3% Annual Utility Rate Increase

SOLAR DEVELOPMENT TIMING



CONCLUSIONS & NEXT STEPS



■ Conclusions

- 503K Year 1 Savings
- \$18.4M over 20 Yrs w PPA
- Flat Solar PPA Rates
- Highly Executable Projects
- ✓ Feasibility Analysis
- ✓ PG&E Interconnection Applications

■ Next Steps

- Board Approval, Sign Contracts, Begin Site Evaluations (surveys, geotech)

