
Inspire, Prepare, Empower Solar Program



Tonight's Agenda



- Review of Solar Structure Types
- Review of Solar Locations

Overview: Program Pillars



- Generate substantial and sustained **general fund savings** (~\$500,000)
- **Modernize District's facilities** and campuses with advanced technology
- **Reduce the District's carbon footprint** while improving 21st century campuses for learning and achievement
- Empower the District's STEAM efforts through **project-based learning** opportunities for students
- Create **local green jobs**



Solar Design Considerations

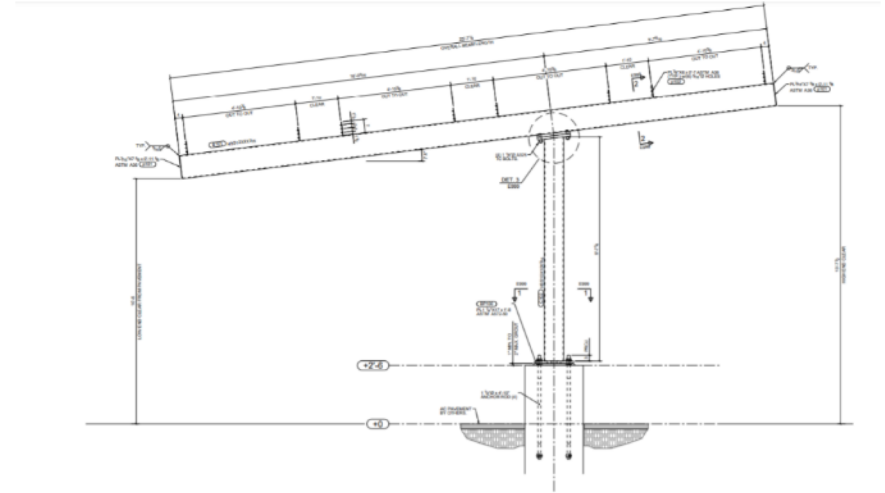
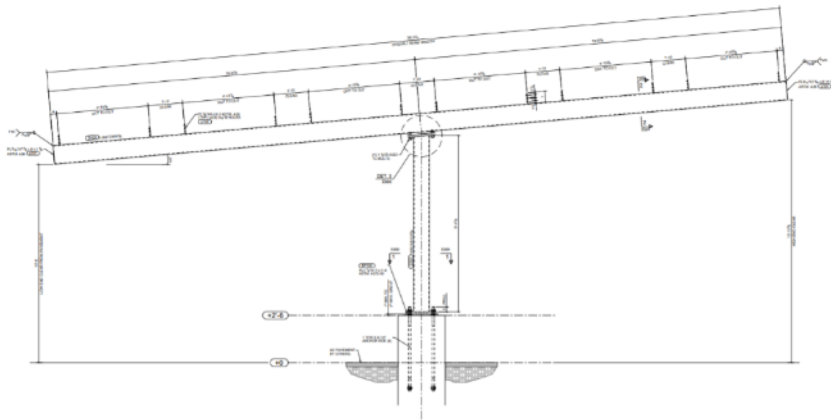
All Sites



- Solar Photovoltaics
 - Prioritize shade structures and equity across sites
 - Consider Principal, staff, and community feedback
 - Maximize energy cost savings (optimal size, orientation)
 - Avoid hazards (e.g. baseballs) and shading from buildings and trees
- Electric Vehicle charging at each site



Sample Structural Designs



Bubb Elementary



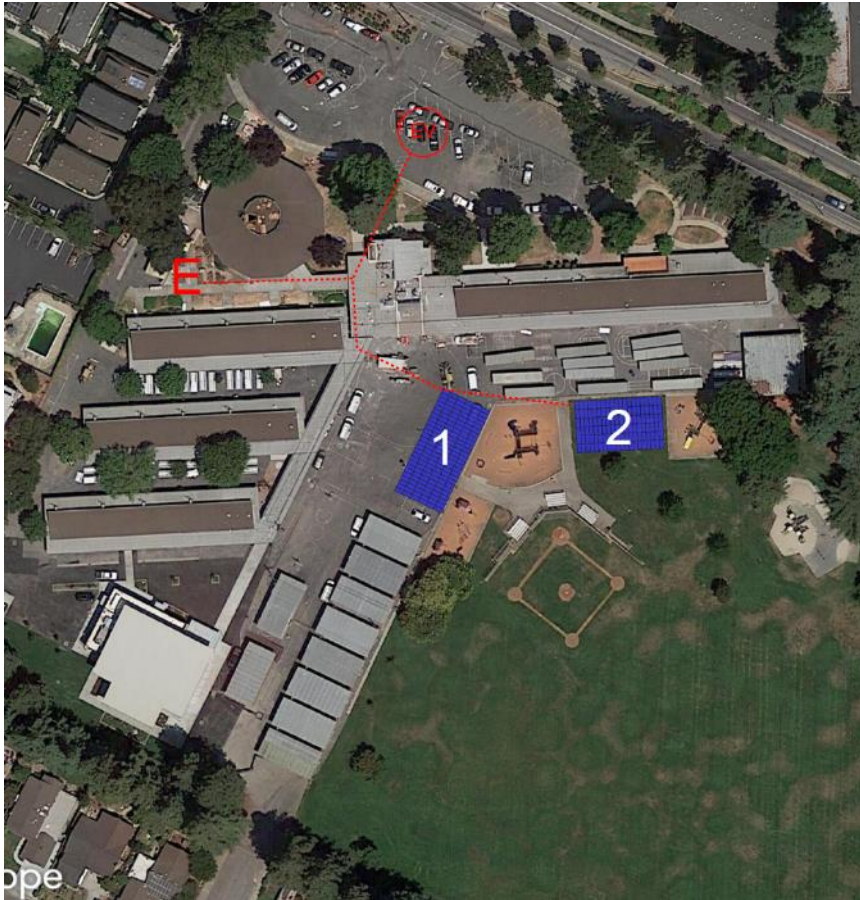
- Site Feedback
 - Did we consider roof and parking?
 - Will new landscaping be required under the arrays?
 - Can the two arrays be closer to each other, or rotated?
 - Can we cover the playground?
- Design Considerations
 - Portables in image at left removed.
 - Array 2 moved to preferred location by site feedback.
 - Distance from baseball diamond

Crittenden Middle

- Site Feedback
 - Concern about appearance and light for neighbors.
 - Concern about impact on future site changes.
 - Requested removal of courtyard array.
- Design Considerations
 - Future site options



Landels Elementary



- Site Feedback
 - Were other locations considered?
 - Can lunch area be under canopy?
 - Will grass grow under canopy?
 - Will they be damaged in an earthquake?
 - Will there be enough space for gym class still?
 - Will there be EV charging?
 - Will the ground under Array 2 be sloped or flat?
- Design Considerations
 - Distance from baseball diamond

Huff Elementary

- Site Feedback
 - Will it look like MV High School parking lot?
 - When will this be completed? (Noise during learning.)
 - Will there be areas fenced off during construction?
 - Will there be seating underneath?
 - Will the tetherball courts near Array 2 be removed?
 - How are the panels cleaned?
 - Will the columns be in the way of playing?
- Design Considerations
 - Portables in image at right removed
 - Distance from baseball diamond



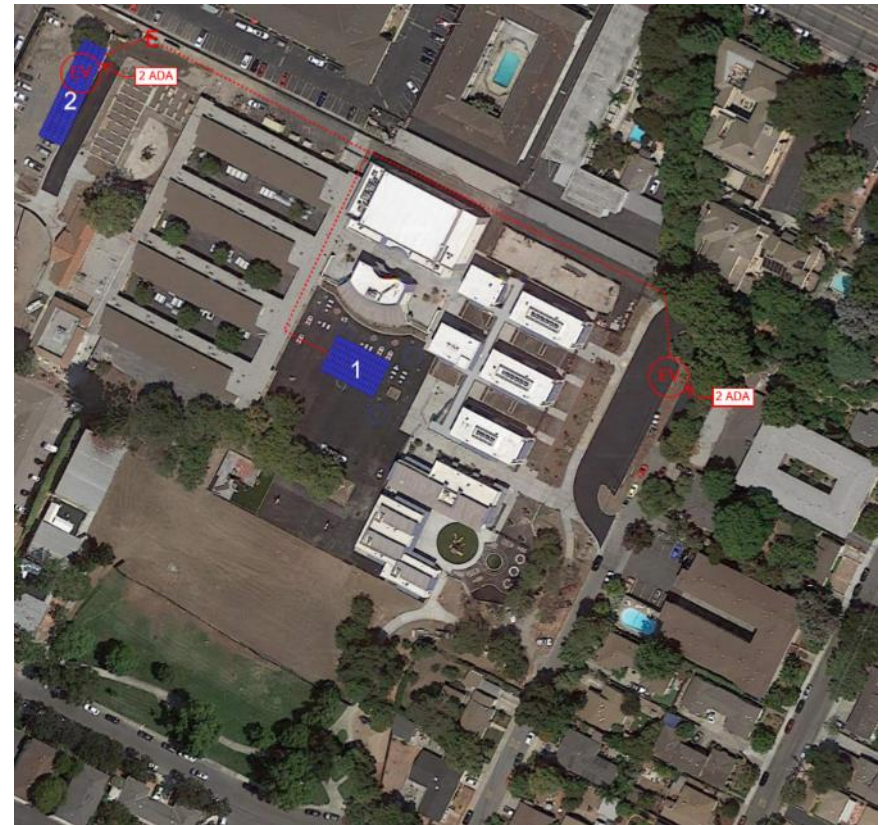
Graham Middle



- Site Feedback
 - Will construction happen during school?
 - What are the ongoing maintenance costs and requirements?
 - Where will the EV chargers be? (Under Array 2)
- Design Considerations
 - Future site options
 - Distance from baseball diamond

Mistral/Castro Elementary

- Site Feedback
 - Oak Elementary in Los Altos has similar structures
 - Can the arrays serve as outdoor seating?
- Design Considerations
 - Array 1 to be shared space for both campuses
 - Each campus lot will have EV charging



Monta Loma Elementary



- Site Feedback
 - Why were these locations selected?
 - C1 area used for emergency meeting point
 - Impact on basketball court
 - Can there be an array in front of the office?
 - Can C1 be moved to a rooftop?
- Design Considerations
 - Options limited by baseball, shade from trees and distance to buildings

Stevenson Elementary & District Office

- Layout Discussion to Follow
- Site Feedback
 - What are the dimensions of the canopies?
 - How is the size determined?
 - Is the canopy portable?
 - Will the C1 structure shade the building to the North? The MUR?
 - Will play balls damage the panels?
- Design Considerations
 - Energy shared between school and DO
 - Constrained by distance to buildings

Stevenson Contract Location

- Large playground array
- Smaller DO parking canopy
- EV charging in both lots



Stevenson Option 1 – DO Lot



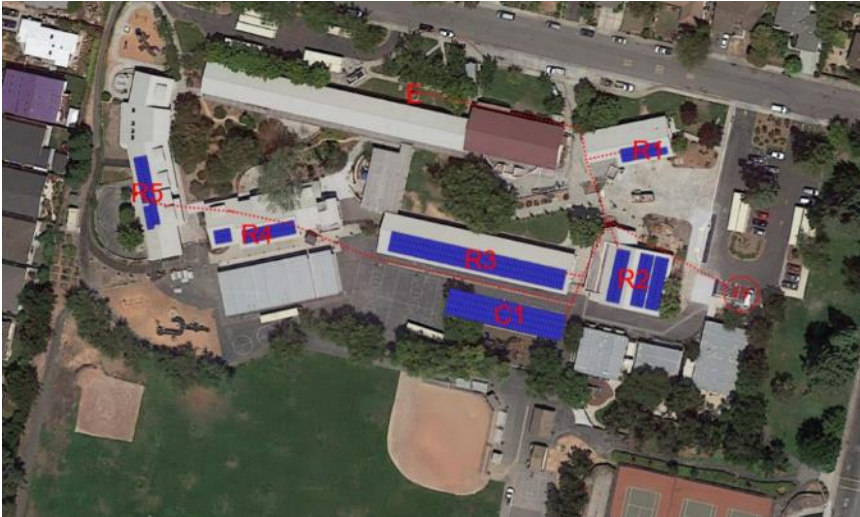
- Storm drain under C3
- Parking space reduction
- Higher clearance than C1
- Shade from trees to south
- Larger array for same output
- EV charging in both lots

Stevenson Option 2 – Rooftop

- Increased timeline to construction
- Uncertain structural upgrades required
- EV charging in both lots



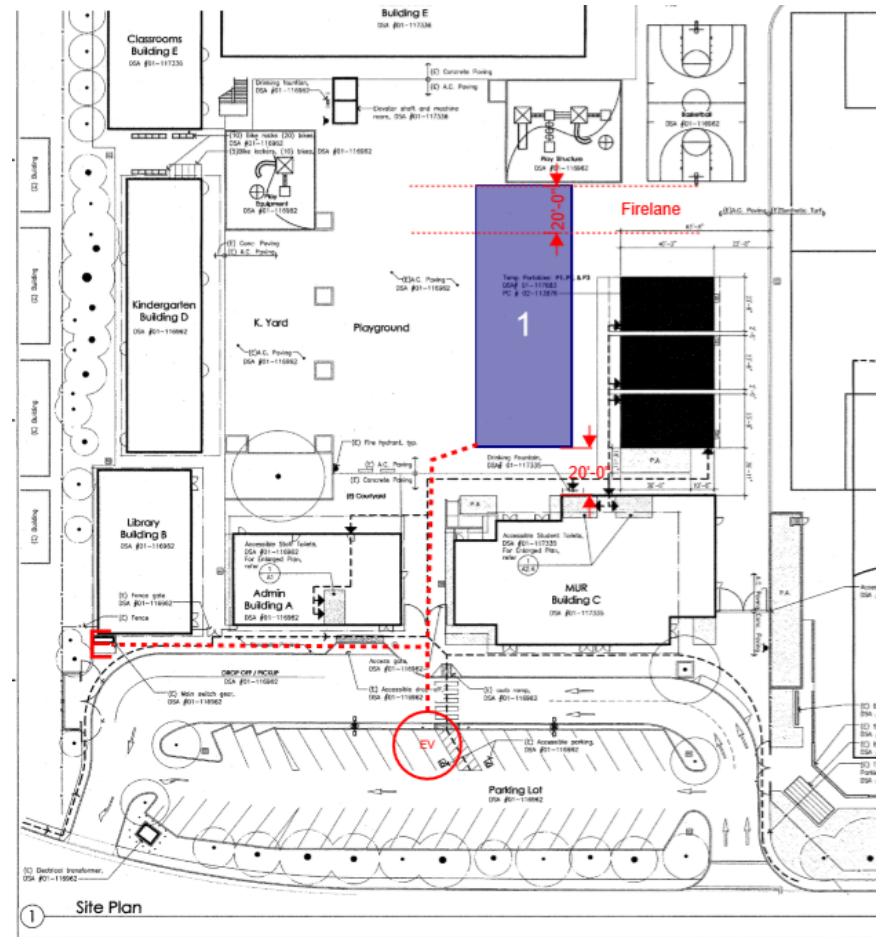
Theuerkauf Elementary



- Site Feedback
 - Why more panels than Stevenson?
 - Why no arrays on the upper building?
 - Can there be shade near the play structure or the portables?
 - Can there be a canopy in the pick-up area?
- Design Considerations
 - Shading from trees in courtyard and parking lot
 - Distance from baseball diamond

Vargas Elementary

- Site Feedback
 - How tall are the canopies?
 - How many shade structures will there be in the blacktop area?
 - Who will be able to use the EV charging stations?
- Design Considerations
 - Limited space relative to energy usage



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Thank You
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Overview: Process to Date



Partner Selection

- ✓ Development of RFP
- ✓ Solicitation of Proposals from Solar Companies
- ✓ Review Proposals
- ✓ Selection of ENGIE as Solar Partner

Project Development

- ✓ Site Audits and Design
- ✓ Proposed Project Layouts, Site & Community Meetings
- ✓ Competitive Bidding for Materials and Labor
- ✓ Approve Energy Services Agreement

Implementation

- 📍 Notice to Proceed
- Final Engineering and DSA Approval
- Construction
- Ongoing Savings, PR, O&M, M&V Services

Sample Playground Shade Canopies



Sample Playground Shade Canopies



Sample Parking Canopies



Sample Roof Mount

