



**CUPERTINO**

# CITY OF CUPERTINO

## AGENDA

### PARKS AND RECREATION COMMISSION

10185 N Stelling Rd, Quinlan Conference Room

Thursday, November 7, 2024

7:00 PM

Members of the public wishing to observe the meeting may do so in one of the following ways:

- 1) Attend in person at Quinlan Community Center, 10185 North Stelling Road
- 2) The meeting will also be streamed live on and online at <https://youtube.com/@cupertinocitycommission>

Members of the public wishing to comment on an item on the agenda may do so in the following ways:

- 1) Appear in person at Quinlan Community Center.
- 2) E-mail comments by 4:00 p.m. on Thursday, November 7 to the legislative body at [parksandrecreationcommission@cupertino.gov](mailto:parksandrecreationcommission@cupertino.gov). These e-mail comments will also be posted to the City's website after the meeting.

Oral public comments may be made during the public comment period for each agenda item.

Members of the audience who address the legislative body are requested to complete a Speaker Card and identify themselves. Completion of Speaker Cards and identifying yourself is voluntary and not required to attend the meeting or provide comments.

#### CALL TO ORDER

#### ROLL CALL

#### CEREMONIAL MATTERS AND PRESENTATIONS

1. Subject: Teen Programs  
Recommended Action: Receive a presentation on Teen Commission, Youth Activity Board, and Recreation Event Volunteers.

#### APPROVAL OF MINUTES

2. Subject: September 5, 2024 Parks and Recreation Commission Meeting Minutes

Recommended Action: Review and approve the September 5, 2024 Parks and Recreation Commission meeting minutes.

[A - Draft Minutes](#)

3. Subject: October 3, 2024 Parks and Recreation Commission Meeting Minutes  
Recommended Action: Review and approve the October 3, 2024 Parks and Recreation Commission meeting minutes.

[A - Draft Minutes](#)

## POSTPONEMENTS

## ORAL COMMUNICATIONS

*This portion of the meeting is reserved for persons wishing to address the Commission on any matter within the jurisdiction of the Commission and not on the agenda. Speakers are limited to three (3) minutes. In most cases, State law will prohibit the Commission from making any decisions with respect to a matter not on the agenda.*

## WRITTEN COMMUNICATIONS

## OLD BUSINESS

## NEW BUSINESS

4. Subject: Capital Improvement Program Photovoltaic Systems Design and Installation project  
Recommended Action: Recommend that City Council approve the Capital Improvement Program Photovoltaic Systems Design and Installation project's conceptual design for five City facilities: Cupertino Library, Community Hall, Cupertino Sports Center, Blackberry Farm, and Quinlan Community Center.

[Staff Report](#)

[A - FY 24-25 CIP Project Narratives Excerpt](#)

[B - PV project costs savings](#)

## STAFF AND COMMISSION REPORTS

## FUTURE AGENDA SETTING

## ADJOURNMENT

*In compliance with the Americans with Disabilities Act (ADA), anyone who is planning to attend this meeting who is visually or hearing impaired or has any disability that needs special assistance should call the City Clerk's Office at 408-777-3223, at least 48 hours in advance of the meeting to arrange for assistance. In addition, upon request in advance by a person with a disability, meeting agendas and writings distributed for the meeting that are public records will be made available in the appropriate*

*alternative format.*

*Any writings or documents provided to a majority of the members after publication of the agenda will be made available for public inspection. Please contact the City Clerk's Office in City Hall located at 10300 Torre Avenue, Cupertino, California 95014, during normal business hours.*

*IMPORTANT NOTICE: Please be advised that pursuant to Cupertino Municipal Code section 2.08.100 written communications sent to the City Council, Commissioners or staff concerning a matter on the agenda are included as supplemental material to the agenda item. These written communications are accessible to the public through the City website and kept in packet archives. Do not include any personal or private information in written communications to the City that you do not wish to make public, as written communications are considered public records and will be made publicly available on the City website.*



# CITY OF CUPERTINO

## Agenda Item

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**24-13467**

**Agenda Date: 11/7/2024**  
**Agenda #: 1.**

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Subject: Teen Programs

Receive a presentation on Teen Commission, Youth Activity Board, and Recreation Event Volunteers.



# CITY OF CUPERTINO

## Agenda Item

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**24-13469**

**Agenda Date: 11/7/2024**  
**Agenda #: 2.**

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Subject: September 5, 2024 Parks and Recreation Commission Meeting Minutes

Review and approve the September 5, 2024 Parks and Recreation Commission meeting minutes.



**CITY OF CUPERTINO**  
**PARKS AND RECREATION COMMISSION**  
10185 N Stelling Rd, Quinlan Conference Room  
Thursday, September 5, 2024  
7:00 PM  
DRAFT MINUTES

**CALL TO ORDER**

Chair Shearin called the Parks and Recreation Commission meeting to order at 7:00 p.m. in the Quinlan Community Center Conference Room, 10185 N Stelling Rd.

**ROLL CALL**

Commissioners present: Jennifer Shearin, Hemant Buch, Seema Swamy (7:01 p.m.),  
Claudio Bono  
Commissioners absent: Carol Stanek  
Staff present: Jenny Koverman, Jessica Javier, Sonya Lee, Jacinta Liang  
Guest speakers: None

**CEREMONIAL MATTERS AND PRESENTATIONS**

1. Subject: Parks and Recreation Department Summer Programs and Events

Recommended Action: Receive a presentation on the Parks and Recreation Department Summer Programs and Events.

Sonya Lee, Recreation Manager, presented on summer programs and camps, summer events and festivals, sponsorships, and upcoming events.

Commissioner Swamy requested clarification on Pizza and Politics and whether it was local politics or national. Recreation Manager Lee clarified local politics. Added that the event has a structured format that includes a teen debate and Councilmembers [Mayor's] roundtable. Commissioner Swamy requested clarification on average number of participants. Recreation Manager Lee clarified the previous event had an estimated 50 participants.

Commissioner Bono requested clarification on whether not they collect general feedback from the programs and camps. Recreation Manager Lee clarified that they survey periodically, and the Recreation Coordinators work with their respective staff to collect additional feedback as well.

Commissioner Bono requested clarification on whether or not the [\$24,000] sponsorship for the Summer Concert Series was enough or if they are seeking more funding for next

year. Recreation Manager Lee clarified that the City could always do more with more funding, but as far as paying the bands, the sponsorship was able to cover payment for the nine bands. Added that if there were to be more sponsorship funding available in the future, they could seek out bigger and more well-known bands that are more costly.

Vice Chair Buch requested clarification on advertising. Recreation Manager Lee clarified that the Community Outreach Specialist in the department coordinates the marketing efforts including posting to Facebook, Instagram, City website, and the recreation brochure.

Chair Shearin requested clarification on the process for seeking out sponsorship opportunities. Recreation Manager Lee clarified that the Event Coordinator is developing a list of local businesses to send out the sponsorship form to, and they will continue to contact businesses that staff feels would be a match for a particular event. Added that they are learning as they are going since seeking out sponsorships is new for the department.

Chair Shearin requested clarification on the increasing number of participants in summer camps and classes, and whether or not that is attributed to an increase in class offerings. Recreation Manager Lee clarified that they are offering around the same number of camps and classes as the year before. Added that certain camps and classes are doing well, while others are struggling, but ultimately, they are still analyzing the trends as this is only the second year things are open post COVID.

Vice Chair Buch recommended the City provide additional alternative seating such as tables and chairs (verses sitting on the grass) at the summer concerts. Recreation Manager Lee commented that they have not seen a need for this as there are other alternatives in the park such as the concrete in the amphitheater or nearby picnic tables.

## **APPROVAL OF MINUTES**

2. Subject: August 1, 2024 Parks and Recreation Commission Meeting Minutes  
Recommended Action: Review and approve the August 1, 2024 Parks and Recreation Commission meeting minutes.

Commissioner Swamy motioned to approve the August 1, 2024 Parks and Recreation Commission meeting minutes as submitted. Commissioner Bono seconded. Motion carried with 4 yes and 1 absent.

## **POSTPONEMENTS**

None

## **ORAL COMMUNICATIONS**

Lalitha Maruvada, Cupertino resident, supported seniors keeping their community garden beds beyond the three-year period.

## **WRITTEN COMMUNICATIONS**

Written communications were emailed to the commission and are included for the record.

## **OLD BUSINESS**

None

## **NEW BUSINESS**

3. Subject: Fiscal Year 2023-2024 Community Funding Grant Program Written Reports  
Recommended Action: Receive an update on the Fiscal Year 2023-24 Community Funding Grant Program Written Reports.

Written communications for this item included an email to the commission and is included for the record.

Jacinta Liang, Management Analyst, presented a summary of the FY 23-24 Community Funding Grant Program written reports.

Commissioner Swamy requested clarification on No Time to Waste's Feed the Need Program. Management Analyst Liang clarified that the number of clients served is calculated through a food recovery metric app that records the total pounds of food collected from donors and converts that to the number of meals and sides recovered. Added that majority of the donated food comes Santa Clara Kaiser and local bakeries and restaurants.

Chair Shearin requested clarification of the 12,989 number of Cupertino residents served for No Time to Waste, considering that the number is approximately one quarter of Cupertino residents. Management Analyst Liang clarified that the number likely represents the number of meals served to the community.

Chair Shearin requested for the Commission to have the Community Funding Grant Program written reports summary available during the next Community Funding cycle, specifically any previous grant received, and number of residents served.



Commissioner Swamy requested clarification on how the funds were spent for No Time to Waste, and how the organization predicts the amount of surplus food. Management Analyst Liang clarified that most of the funds were spent for transportation of food collections and deliveries. Clarified that the organization likely estimates the amount of surplus food based on the previous year.

Commissioner Bono commented that there are people who might need up to three or four meals per day, so the number of Cupertino residents served [12,989] by No Time to Waste could be misleading considering it is likely based on number of meals served. Commissioner Swamy supported Commissioner Bono's comments.

Chair Shearin requested clarification on the last time the Community Funding application form was reviewed. Management Analyst Liang clarified that the policy was last reviewed in 2022. Added that the Commission could discuss format changes to the application or annual report, however, changing or adding new questions would need to be approved by Council.

Chair Shearin requested a solution to the format of the application to allow for long responses not to be cut off in text boxes.

#### **STAFF AND COMMISSION REPORTS**

Jenny Koverman, Recreation Manager, presented the Liaison's update as submitted.

Chair Shearin expressed her gratitude for the Movies in the Park staff.

#### **FUTURE AGENDA SETTING**

Chair Shearin requested information on the Community gardens and policies.

Vice Chair Buch requested an update on park amenity improvements, including how often [the prioritization list] is updated. Commissioner Bono seconded.

#### **ADJOURNMENT**

Chair Shearin adjourned the meeting at 7:58 p.m. to the October 3, 2024 meeting at 7:00 p.m.

Respectfully Submitted by,

Jessica Javier, Administrative Assistant  
Parks and Recreation Department

*Minutes approved at the \_\_\_\_ regular meeting*

DRAFT



# CITY OF CUPERTINO

## Agenda Item

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**24-13468**

**Agenda Date: 11/7/2024**  
**Agenda #: 3.**

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Subject: October 3, 2024 Parks and Recreation Commission Meeting Minutes

Review and approve the October 3, 2024 Parks and Recreation Commission meeting minutes.



**CITY OF CUPERTINO**  
**PARKS AND RECREATION COMMISSION**  
10185 N Stelling Rd, Quinlan Conference Room  
Thursday, October 3, 2024  
7:00 PM  
**DRAFT MINUTES**

**CALL TO ORDER**

Vice Chair Buch called the Parks and Recreation Commission meeting to order at 7:00 p.m. in the Quinlan Community Center Conference Room, 10185 N Stelling Rd.

**ROLL CALL**

Commissioners present: Hemant Buch, Carol Stanek, Claudio Bono  
Commissioners absent: Jennifer Shearin, Seema Swamy  
Staff present: Jenny Koverman, Jessica Javier, Molly James, Jason Bisely, D'Miles Salmon  
Guest speakers: None

**CEREMONIAL MATTERS AND PRESENTATIONS**

1. Subject: Parks and Recreation Department Outdoor Recreation Division  
Recommended Action: Receive a presentation on the Parks and Recreation Department Outdoor Recreation Division.

Jenny Koverman, Recreation Manager, introduced Molly James, Recreation Manager, to present on the item. Introduced Jason Bisely, Recreation Coordinator overseeing Blackberry Farm, and D'Miles Salmon, Recreation Coordinator overseeing McClellan Ranch Preserve. Presented on Blackberry Farm Golf Course, Blackberry Farm Park, and McClellan Ranch Preserve.

Commissioner Stanek requested clarification on the declining numbers at the Blackberry Farm Golf Course (BBFGC) and whether there were any plans to increase marketing. Recreation Manager James clarified that they saw a huge increase spike during COVID, but now post-COVID the numbers are leveling out. Added that there will be a new Recreation Coordinator overseeing BBFGC starting in November who will be tasked with bringing in new ways to expand the golf course offerings.

Commissioner Stanek requested clarification on the water irrigation replacement at BBFGC. Recreation Manager James clarified that the Capital Improvement Programs Manager informed her that it is currently not a funded project. Added that the golf course maintenance contractor, Professional Turf Management (PTM), has been great

patching any holes as needed, and they have the ability to bring in a subcontractor if further issues arise.

Commissioner Stanek requested clarification on the March Pooch Plunge and whether or not the pools will be heated. Recreation Coordinator Bisely clarified the pools will be ready as they prepare for the season around that time already.

Commissioner Stanek requested clarification on the expansion of camps and classes due to high interest. Recreation Manager James clarified that they hope to hire more staff next year to expand the offerings.

Commissioner Stanek requested clarification on the community gardens and the percentage of plots that are being utilized by high-density [housing] users, and how they are working towards opening plots to decrease the waitlist. Recreation Coordinator Bisely clarified he doesn't know the exact percentage offhand. Clarified that as the first three-year term is coming to an end, staff have reached out to all current gardeners to inform them that their permit is ending and if they are interested in renewing, they can get back on the waitlist 30 days prior to their expiration. Added that they have heard back from a handful of gardeners already that they are ready to vacate their garden plot early, and there are people from the waitlist who no longer wish to permit a garden plot, so they have been getting through the waitlist faster than anticipated.

Commissioner Stanek requested clarification on the likelihood that a current gardener would be able to renew their permit and keep their plot. Recreation Coordinator Bisely clarified they are hoping to accommodate 100% of those gardeners or close to that.

Vice Chair Buch requested clarification on the camps and classes, and whether or not they could increase the price to hire more staff as needed. Recreation Manager James clarified that they increased the price last year, however, they are still restricted to the capacity numbers allowed in the Environmental Education Center.

Vice Chair Buch requested clarification on the size of the community garden plots, and whether or not they can be shared. Recreation Coordinator Bisely clarified that the plots are large, and sharing would be up to the gardener, but often they see family members (e.g. parents and children) work on the garden plot together.

Vice Chair Buch requested clarification on what happens to gardeners when they do not take care of their garden plot. Recreation Coordinator Bisely clarified that the Part-Time

Community Coordinator does check, and staff will follow up with the multi-notification warning process for any violations.

Commissioner Stanek commented that she is appreciative of staff for following up with gardeners who are not maintaining their garden plots, and thanked staff for the Augmented Reality (AR) App Tour at McClellan Ranch Preserve.

Commissioner Bono thanked the staff for their presentation and commended the AR App at McClellan as it will be able to provide more opportunities for the community to enjoy from their mobile devices.

Vice Chair Buch recommended making the AR App mobile. Recreation Coordinator Salmon clarified that you have to show up at McClellan first to unlock the AR App, but if you're unable to finish or would like to go back you have the ability to take it home, browse later, and share with others.

Vice Chair Buch requested clarification on whether or not staff considered adding diving boards to the Blackberry Farm pools. Recreation Manager James clarified that the pools are not deep enough to meet the California standards.

Commissioner Stanek expressed appreciation for staff incorporating the Labyrinth at McClellan into their programming.

### **APPROVAL OF MINUTES**

2. Subject: September 5, 2024 Parks and Recreation Commission Meeting Minutes  
Recommended Action: Review and approve the September 5, 2024 Parks and Recreation Commission meeting minutes.

Item postponed to the next commission meeting.

### **POSTPONEMENTS**

None

### **ORAL COMMUNICATIONS**

None

### **WRITTEN COMMUNICATIONS**

None

**OLD BUSINESS**

None

**NEW BUSINESS**

None

**STAFF AND COMMISSION REPORTS**

Recreation Manager Koverman presented the Liaison’s update as submitted.

**FUTURE AGENDA SETTING**

None

**ADJOURNMENT**

Vice Chair Buch adjourned the meeting at 7:38 p.m. to the November 7, 2024 meeting at 7:00 p.m.

Respectfully Submitted by,

Jessica Javier, Administrative Assistant  
Parks and Recreation Department  
*Minutes approved at the \_\_\_\_\_ regular meeting*

DRAFT



# CITY OF CUPERTINO

## Agenda Item

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**24-13470**

**Agenda Date: 11/7/2024**  
**Agenda #: 4.**

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Subject: Capital Improvement Program Photovoltaic Systems Design and Installation project

Recommend that City Council approve the Capital Improvement Program Photovoltaic Systems Design and Installation project's conceptual design for five City facilities: Cupertino Library, Community Hall, Cupertino Sports Center, Blackberry Farm, and Quinlan Community Center.





## PUBLIC WORKS DEPARTMENT

CITY HALL  
10300 TORRE AVENUE • CUPERTINO, CA 95014-3255  
TELEPHONE: (408) 777-3354 • FAX: (408) 777-3333  
CUPERTINO.ORG

### PARKS AND RECREATION COMMISSION STAFF REPORT

Meeting: November 7, 2024

#### Subject

Capital Improvement Program Photovoltaic Systems Design and Installation project

#### Recommended Action

Recommend that City Council approve the Capital Improvement Program Photovoltaic Systems Design and Installation project's conceptual design for five City facilities: Cupertino Library, Community Hall, Cupertino Sports Center, Blackberry Farm, and Quinlan Community Center.

#### Executive Summary

This report provides scope and fiscal information on each proposed site of the Photovoltaic Systems Design and Installation (PV) Capital Improvement Program (CIP) project.

#### Background Information

The PV project was approved by the City Council as part of the Fiscal Year (FY) 24-25 annual budget. The PV project description included in the budget adoption and meeting details is attached (Attachment A).

The Net Energy Metering (NEM) program is administered by the California Public Utilities Commission and provides credits to a building's utility bill for producing excess on-site clean energy over a 20-year period. In 2023 PG&E announced a rate decrease for electricity generated by photovoltaic (PV) systems (NEM 3) but provided a window to allow grandfathering the more economically attractive NEM 2.0 rates if interconnection applications were successfully submitted and corresponding systems operational by 2026.

#### Reasons for Recommendation

NEM 2.0 Interconnection Applications were successfully submitted to PG&E for five Cupertino facilities: Blackberry Farm Recreation and Pool facility, Community Hall, Cupertino Library, Quinlan Community Center, and Cupertino Sports Center. This Project aims to design and build PV systems at all five locations.

NEM 2.0 projects must be completed by April 15, 2026 to receive the incentive. Otherwise, the NEM 3.0 program, that offers reduced incentives/savings, would need to be pursued. NEM 2.0 provides 75 - 80% greater compensation than NEM 3 rates for electricity that is fed back into the electrical system. The savings in utility costs are projected to be \$500,000 annually, and \$26.5 million over a 30yr lifespan. For more detail, please see attachment B.

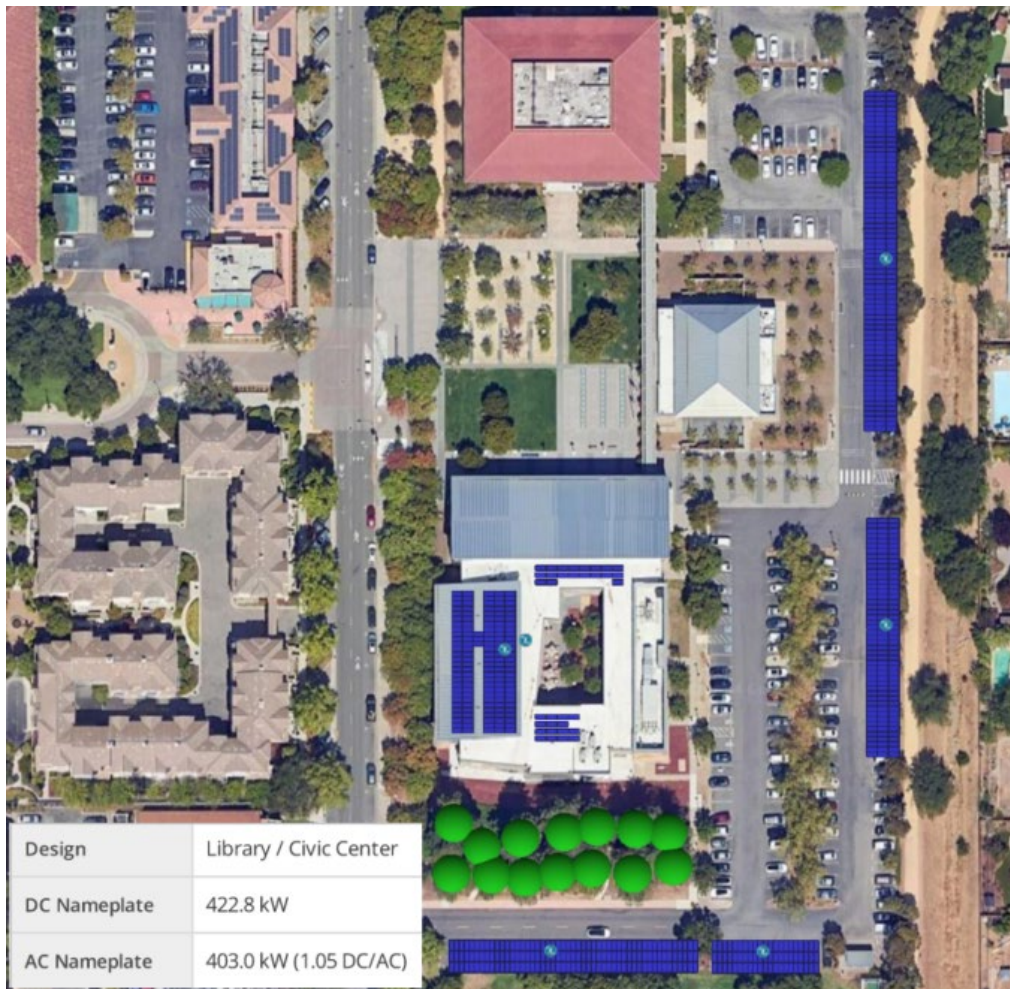
The City CIP staff is compiling a Conceptual Design Report that includes technical and cost analysis data for each site. The following narratives from that report depict the proposed layouts and projected cost savings at each site.

### *Cupertino Library*

A number of options were considered for this site. The Library roof locations have an advantageous size, but only one of the large roofs is well-oriented to the west or south. Standing seam rooftops (supporting the two largest rooftop arrays) are ideal for supporting solar, as racking can be clamped to the standing seams as opposed to penetrating the roof surface. Long trenching/boring routes will be required to consolidate generation at point of interconnection. While the proposed carport locations took the trees into consideration, some smaller trees will need to be removed or significantly trimmed to support the installation.

The electrical bill at the Library would be reduced from ~\$325K annually to ~\$120K annually, with projected lifecycle savings of \$11.7 million. The City's costs for design and construction of \$2.6 million could be recouped in just approximately 11 years.

The complication for the Library site is that the tenant, the Santa Clara County Library District (SCCLD), pays the electrical bill. The fiscal benefit of the cost savings from the photovoltaic installation would go to the SCCLD for the next twenty years. The payback period for the project would be extended accordingly.



| <b>Library</b>                      |              |
|-------------------------------------|--------------|
| Last 12 months kWh usage            | 1,048,978    |
| Last 12 months cost of electrical   | \$322,517    |
| Cost per kWh (ave.)                 | \$0.31       |
| PV systems kWh generation           | 621477       |
| PV systems annual savings*          | \$202,501    |
| PV systems annual electrical bill** | \$120,016    |
| PV systems lifecycle savings***     | \$11,701,727 |

| <b>Meter #1932850108</b>                     |             |
|--|-------------|
| Construction Cost - PV only                  | \$3,801,000 |
| Construction Cost - EV only                  | \$300,000   |
| Construction Cost - Total (PV+EV)            | \$4,101,000 |
| Direct Payback (IRA) funding (40%, PV only)  | \$1,520,400 |
| City Funding                                 | \$2,580,600 |
| Payback period (years, discounted cash flow) | 10.65       |
| ROI  | 453%        |

### *Blackberry Farm Recreation and Pool facility*

A number of options were considered for this site. The building roof locations are too small for a simple installation, and the solar orientation is not ideal. The proposed layout is a single continuous system that requires fewer trenching/ boring paths to the electrical point of interconnection. The installation is far enough from trees that tree trimming will not be needed to ensure solar access, and existing netting system will protect array from golf balls. With system shading parking stalls, proportional shade coverage will need to be provided on ADA parking stalls. The State and Cupertino green energy code for EV parking requirements are under review and may be substantial.

The electrical bill at Blackberry Farm would be reduced from costing ~\$33K annually to generating a revenue of almost \$6K annually (because the PV system would generate slightly more than the demand, and thus selling power back to PG&E). The lifecycle savings are projected to be \$1.6 million. The City’s costs for design and construction of \$675K could be recouped in approximately 14 years.



| Blackberry Farm                     |             |
|-------------------------------------|-------------|
| Last 12 months kWh usage            | 110,428     |
| Last 12 months cost of electrical   | \$32,539    |
| Cost per kWh (ave.)                 | \$0.29      |
| PV systems kWh generation           | 110948      |
| PV systems annual savings*          | \$38,253    |
| PV systems annual electrical bill** | -\$5,714    |
| PV systems lifecycle savings***     | \$1,587,032 |

| Meter #114315284                             |             |
|--|-------------|
| Construction Cost - PV only                  | \$955,500   |
| Construction Cost - EV only                  | \$100,000   |
| Construction Cost - Total (PV+EV)            | \$1,055,500 |
| Direct Payback (IRA) funding (40%, PV only)  | \$382,200   |
| City Funding                                 | \$673,300   |
| Payback period (years, discounted cash flow) | 13.99       |
| ROI  | 236%        |

### *Quinlan Community Center*

A number of options were considered for this site. Preserving significant trees and working within the aesthetics of the park were high priorities. This layout provides maximal shaded parking and significantly shaded picnic area. Utilizes existing roof areas, mitigating overall costs of the system. Northern carport will require some tree trimming (overall tree health will not be compromised, however) to maintain solar access and may require shade be provided for some existing ADA stalls. The picnic area structure will be designed to respond architecturally to the layout of the picnic area (rather than one large single shed roof as shown in the illustration).

The electrical bill at Quinlan would be reduced from costing ~\$122K annually to generating a revenue of almost \$33K annually (because the PV system would generate slightly more than the demand, and thus selling power back to PG&E). The lifecycle savings are projected to be \$7.4 million. The City's costs for design and construction of \$1.6 million could be recouped in approximately 9 years.



| Quinlan Center                      |             |
|-------------------------------------|-------------|
| Last 12 months kWh usage            | 383,109     |
| Last 12 months cost of electrical   | \$121,336   |
| Cost per kWh (ave.)                 | \$0.32      |
| PV systems kWh generation           | 453795      |
| PV systems annual savings*          | \$154,217   |
| PV systems annual electrical bill** | -\$32,881   |
| PV systems lifecycle savings***     | \$7,398,086 |

| Meter #0116367009 - 116367840                |             |
|--|-------------|
| Construction Cost - PV only                  | \$2,341,500 |
| Construction Cost - EV only                  | \$150,000   |
| Construction Cost - Total (PV+EV)            | \$2,491,500 |
| Direct Payback (IRA) funding (40%, PV only)  | \$936,600   |
| City Funding                                 | \$1,554,900 |
| Payback period (years, discounted cash flow) | 8.85        |
| ROI  | 476%        |

### *Cupertino Sports Center*

This system is well-aligned to the west and south-facing solar access. The northern array is split around north-south site access path to allow for any traffic which could interfere with the carport array. The tree in the corner between the two arrays would ideally be slightly trimmed to ensure maximum solar access, and trees under the northern arrays would need to be removed.

The electrical bill at the Sports Center would be reduced from ~\$108K annually to ~\$15K annually, with projected lifecycle savings of \$4.5 million. The City’s costs for design and construction of \$1.3 million could be recouped in approximately 11 years.



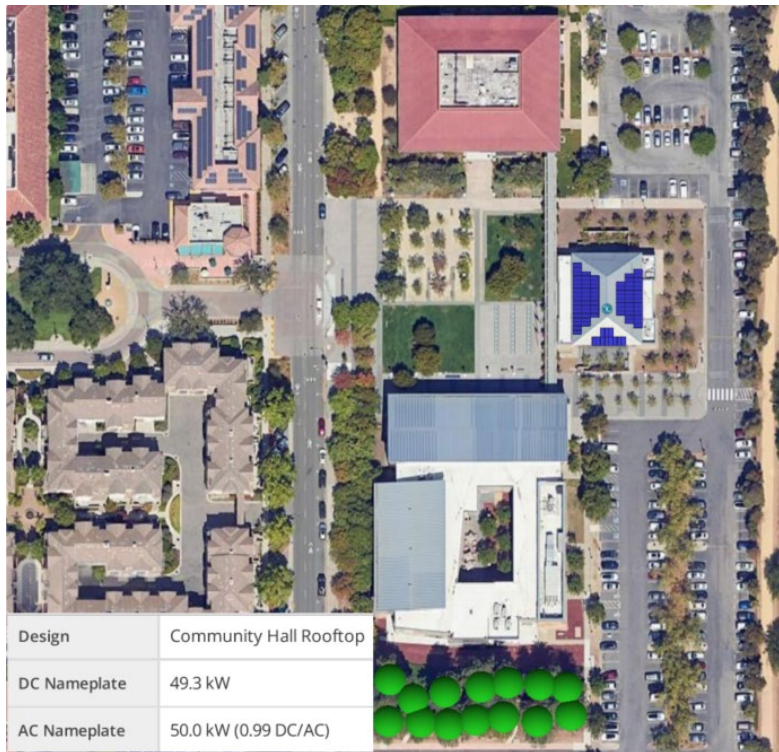
| Sports Center                       |             |
|-------------------------------------|-------------|
| Last 12 months kWh usage            | 329,369     |
| Last 12 months cost of electrical   | \$108,143   |
| Cost per kWh (ave.)                 | \$0.33      |
| PV systems kWh generation           | 322104      |
| PV systems annual savings*          | \$93,047    |
| PV systems annual electrical bill** | \$15,096    |
| PV systems lifecycle savings***     | \$4,511,620 |

| Meter #0116367009 - 116971849                |             |
|--|-------------|
| Construction Cost - PV only                  | \$1,812,300 |
| Construction Cost - EV only                  | \$150,000   |
| Construction Cost - Total (PV+EV)            | \$1,962,300 |
| Direct Payback (IRA) funding (40%, PV only)  | \$724,920   |
| City Funding                                 | \$1,237,380 |
| Payback period (years, discounted cash flow) | 11.06       |
| ROI  | 365%        |

### *Community Hall*

This is an ideally oriented system with rooftop racking. Roof penetrations will not be required, as the system will be able to clamp to the existing standing seam roof profile.

The electrical bill at Community Hall would be reduced from ~\$40K annually to ~\$10K annually, with projected lifecycle savings of \$1.3 million. The City's costs for design and construction of \$1.3 million could be recouped in approximately 7 years.



| Community Hall                      |             |
|-------------------------------------|-------------|
| Last 12 months kWh usage            | 114,600     |
| Last 12 months cost of electrical   | \$39,810    |
| Cost per kWh (ave.)                 | \$0.35      |
| PV systems kWh generation           | 66784       |
| PV systems annual savings*          | \$29,441    |
| PV systems annual electrical bill** | \$10,369    |
| PV systems lifecycle savings***     | \$1,336,267 |

| Meter #0116367009 - 116367449                |           |
|--|-----------|
| Construction Cost - PV only                  | \$376,950 |
| Construction Cost - EV only                  | \$0       |
| Construction Cost - Total (PV+EV)            | \$376,950 |
| Direct Payback (IRA) funding (40%, PV only)  | \$150,780 |
| City Funding                                 | \$226,170 |
| Payback period (years, discounted cash flow) | 7.13      |
| ROI  | 591%      |



This item was presented at the October 17 meeting of the Sustainability Commission. The Commission minutes are not yet published, but the Sustainability Commission voted unanimously to recommend to City Council to approve the Capital Improvements Program (CIP) Photovoltaic Systems Design and have the City Council consider the below options:

- a. Approve the Installation Project's Conceptual Design for five City of Cupertino facilities: Quinlan Community Center, Community Hall, Cupertino Sports Center, Blackberry Farm, and Cupertino Library.
- b. If the above recommendation is not fully approved by the City Council due to budget constraints, then the Sustainability Commission recommends the installation of the Photovoltaic Facilities in order of preference: Quinlan Community Center, Cupertino Sports Center, Community Hall, Cupertino Library, and Blackberry Farm.

The Commission also requests that the City of Cupertino pursue a funding agreement with Santa Clara County Library District for that facility's portion of the project.

This item was also shared with the community in a public meeting held on October 29 at Quinlan Community Center. Minutes are not available from that meeting. [This staff report is submitted for review prior to that meeting taking place. Comments from that meeting may be shared with the Commission during the presentation.]

Following this Commission's meeting, the next steps for the project are:

1. City Council meeting in December 2024 for approval of the design intent for each facility.
2. City Council meeting in January 2025 for award of Design-Build Entity contract (Request for Proposals is currently in process, following a Request for Qualifications to create a list of pre-qualified applicants.)

#### Sustainability Impact

Adding solar generation reduces demand on the electrical grid and provides a foundation to support future electrification of these facilities, which would be achieved by transitioning to electric appliances. Electrification of existing buildings is a goal under Measure BE-3 in the City's Climate Action Plan 2.0.

#### Fiscal Impact

The Photovoltaic Systems Design and Installation (budget unit 420-99-274) was approved as part of the FY 2024-25 Budget at \$6,300,000. There are no recommended changes to the budget.

California Environmental Quality Act

The Project is Categorically Exempt as Class 1, Existing Facilities Under the California Environmental Quality Act (CEQA) Guidelines Section 15301 and on a Separate and Independent Basis is Exempt as Class 3, Construction of Small Structures, Under CEQA Guidelines Section 15301.

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Prepared by: Susan Michael, Capital Improvement Program Manager

Reviewed by: Chad Mosley, Director of Public Works

Attachments:

A – FY 24-25 CIP Project Narratives Excerpt

B – PV project costs savings



# Photovoltaic Systems Design & Installation

|                                      |                         |
|--------------------------------------|-------------------------|
| <b>Proposed Funding</b>              | \$ 6,300,000            |
| <b>City Funding</b>                  | \$ 6,300,000            |
| <b>External Funding</b>              | \$ 0                    |
| <b>Funding Source, Approved Plan</b> | CR, CAP                 |
| <b>Project Category</b>              | Facilities              |
| <b>Project Type</b>                  | Design and Construction |
| <b>Location</b>                      | Various                 |
| <b>Dept. Priority</b>                | High                    |
| <b>Origin of Request</b>             | Public Works            |



## Project Description

In 2023 PG&E announced a rate decrease for electricity generated by photovoltaic (PV) systems (NEM 3), but provided a window to allow grandfathering the more economically-attractive NEM 2.0 rates if interconnection applications were successfully submitted and corresponding systems operational by 2026. NEM 2.0 Interconnection Applications were successfully submitted to PG&E for five Cupertino facilities: Blackberry Farm, Civic Center, Library, Quinlan Community Center & Senior Center, and Sports Center. This project aims to design and build PV systems at all five locations. This project proposes design/build of these systems, pending design development reviews for each facility.

## Project Justification

The City must connect the proposed photovoltaic systems to the grid by 4/15/2026 in order to take advantage of the NEM 2.0 applications, which provides 75 – 80% greater compensation than NEM 3 rates for electricity that is fed back into the electrical system. The savings in utility costs are projected to be \$500,000 annually, and \$17.8M over a 30yr lifespan.

## Prioritization

Installation of the PV systems is projected to save \$500,000 annually. The use of cleaner energy sources is a CAP goal. CA Government code allows for streamlined sourcing of Energy Service Companies (ESCO) for design/build implementation to facilitate these types of projects. It is projected that this project will qualify for \$1.9M in Inflation Reduction Act credits.

## Projected Schedule

Conceptual Design development and cost analysis: Summer 2024  
Design-Build: Winter 2024 to April 2026

## Funding Information

The proposed budget will enable design and construction of the systems. Inflation Reduction Act credits projected for this project are approximately \$1.9M. Staff will also pursue other grant funding opportunities.

## Operating Budget Impacts

Installation of the PV systems is projected to save \$500,000 annually in utility costs. Additional staffing will not be required for ongoing operations and maintenance.

ATTACHMENT B

17-Oct-24

PHOTOVOLTAIC PROJECT COST/SAVINGS

\*Annual savings includes 5% utility escalation, Year 1

\*\*\*Lifecycle Savings (30yrs) includes: 5% utility escalation, 0.4% module degradation, 30 years, NEM3 Included

\*\*The costs (B) are offset by the kWh savings (E), resulting in lowered electrical bill (F)

\*\*\*\*Discounted cashflow methodology includes: 5% utility escalation, 0.4% module degradation, 30 years, NEM3

| Facility  | A         | B         | C                   | D                         | E                          | F                                   | G                               | H                     | I                       | J                       | K                            | L            | M                           |
|---|-----------|-----------|---------------------|---------------------------|----------------------------|-------------------------------------|---------------------------------|-----------------------|-------------------------|-------------------------|------------------------------|--------------|-----------------------------|
|   | kWh       | kWh Cost  | cost per kWh (ave.) | PV systems kWh generation | PV systems annual savings* | PV systems annual electrical bill** | PV systems lifecycle savings*** | Constrn Cost: PV only | Constrn Cost: EVCS only | Constrn. Cost (PV + EV) | IRA funding (40% of PV only) | City Funding | Payback Period (years) **** |
| <i>formula</i>                                  |           |           | <i>A/B</i>          |                           |                            | <i>B - E</i>                        |                                 |                       |                         | <i>H + I</i>            | <i>H * 40%</i>               | <i>J - K</i> |                             |
| Library (1932850108)                            | 1,048,978 | \$322,517 | \$0.31              | 621,477                   | \$202,501                  | \$120,016                           | \$11,701,727                    | \$3,801,000           | \$300,000               | \$4,101,000             | \$1,520,400                  | \$2,580,600  | 10.65                       |
| BBF (114315284)                                 | 110,428   | \$32,539  | \$0.29              | 110,948                   | \$38,253                   | -\$5,714                            | \$1,587,032                     | \$955,500             | \$100,000               | \$1,055,500             | \$382,200                    | \$673,300    | 13.99                       |
| Quinlan Community Center (0116367009-116367840) | 383,109   | \$121,336 | \$0.32              | 453,795                   | \$154,217                  | -\$32,881                           | \$7,398,086                     | \$2,341,500           | \$150,000               | \$2,491,500             | \$936,600                    | \$1,554,900  | 8.85                        |
| Sports Center (0116367009-116971849)            | 329,369   | \$108,143 | \$0.33              | 322,104                   | \$93,047                   | \$15,096                            | \$4,511,620                     | \$1,812,300           | \$150,000               | \$1,962,300             | \$724,920                    | \$1,237,380  | 11.06                       |
| Community Hall (0116367009-116367449)           | 114,600   | \$39,810  | \$0.35              | 66,784                    | \$29,441                   | \$10,369                            | \$1,336,267                     | \$376,950             | \$0                     | \$376,950               | \$150,780                    | \$226,170    | 7.13                        |
|   |           | \$624,345 |                     |                           | \$517,459                  | \$106,886                           | \$26,534,732                    | \$9,287,250           | \$700,000               | \$9,987,250             | \$3,714,900                  | \$6,272,350  | 10.28                       |

decreased by: 517,459 with 20% contingency \$11,984,700

Four sites, WITHOUT BBF

|   |           |           |        |         |           |           |              |             |           |             |             |             |       |
|---|-----------|-----------|--------|---------|-----------|-----------|--------------|-------------|-----------|-------------|-------------|-------------|-------|
| Library (1932850108)                            | 1,048,978 | \$322,517 | \$0.31 | 621,477 | \$202,501 | \$120,016 | \$11,701,727 | \$3,801,000 | \$300,000 | \$4,101,000 | \$1,520,400 | \$2,580,600 | 10.65 |
| Quinlan Community Center (0116367009-116367840) | 383,109   | \$121,336 | \$0.32 | 453,795 | \$154,217 | -\$32,881 | \$7,398,086  | \$2,341,500 | \$150,000 | \$2,491,500 | \$936,600   | \$1,554,900 | 8.85  |
| Sports Center (0116367009-116971849)            | 329,369   | \$108,143 | \$0.33 | 322,104 | \$93,047  | \$15,096  | \$4,511,620  | \$1,812,300 | \$150,000 | \$1,962,300 | \$724,920   | \$1,237,380 | 11.06 |
| Community Hall (0116367009-116367449)           | 114,600   | \$39,810  | \$0.35 | 66,784  | \$29,441  | \$10,369  | \$1,336,267  | \$376,950   | \$0       | \$376,950   | \$150,780   | \$226,170   | 7.13  |
|   |           | \$591,805 |        |         | \$479,206 | \$112,599 | \$24,947,700 | \$8,331,750 | \$600,000 | \$8,931,750 | \$3,332,700 | \$5,599,050 | 9.98  |

decreased by: 479,206 with 20% contingency \$10,718,100

Three sites, WITHOUT BBF and Library

|   |         |           |        |         |           |           |              |             |           |             |             |             |       |
|---|---------|-----------|--------|---------|-----------|-----------|--------------|-------------|-----------|-------------|-------------|-------------|-------|
| Quinlan Community Center (0116367009-116367840) | 383,109 | \$121,336 | \$0.32 | 453,795 | \$154,217 | -\$32,881 | \$7,398,086  | \$2,341,500 | \$150,000 | \$2,491,500 | \$936,600   | \$1,554,900 | 8.85  |
| Sports Center (0116367009-116971849)            | 329,369 | \$108,143 | \$0.33 | 322,104 | \$93,047  | \$15,096  | \$4,511,620  | \$1,812,300 | \$150,000 | \$1,962,300 | \$724,920   | \$1,237,380 | 11.06 |
| Community Hall (0116367009-116367449)           | 114,600 | \$39,810  | \$0.35 | 66,784  | \$29,441  | \$10,369  | \$1,336,267  | \$376,950   | \$0       | \$376,950   | \$150,780   | \$226,170   | 7.13  |
|   |         | \$269,289 |        |         | \$276,705 | -\$7,416  | \$13,245,973 | \$4,530,750 | \$300,000 | \$4,830,750 | \$1,812,300 | \$3,018,450 | 9.46  |

decreased by: 276,705 with 20% contingency \$5,796,900

Four sites, WITHOUT LIBRARY

|   |         |           |        |         |           |           |              |             |           |             |             |             |       |
|---|---------|-----------|--------|---------|-----------|-----------|--------------|-------------|-----------|-------------|-------------|-------------|-------|
| BBF (114315284)                                 | 110,428 | \$32,539  | \$0.29 | 110,948 | \$38,253  | -\$5,714  | \$1,587,032  | \$955,500   | \$100,000 | \$1,055,500 | \$382,200   | \$673,300   | 13.99 |
| Quinlan Community Center (0116367009-116367840) | 383,109 | \$121,336 | \$0.32 | 453,795 | \$154,217 | -\$32,881 | \$7,398,086  | \$2,341,500 | \$150,000 | \$2,491,500 | \$936,600   | \$1,554,900 | 8.85  |
| Sports Center (0116367009-116971849)            | 329,369 | \$108,143 | \$0.33 | 322,104 | \$93,047  | \$15,096  | \$4,511,620  | \$1,812,300 | \$150,000 | \$1,962,300 | \$724,920   | \$1,237,380 | 11.06 |
| Community Hall (0116367009-116367449)           | 114,600 | \$39,810  | \$0.35 | 66,784  | \$29,441  | \$10,369  | \$1,336,267  | \$376,950   | \$0       | \$376,950   | \$150,780   | \$226,170   | 7.13  |
|   |         | \$301,828 |        |         | \$314,958 | -\$13,130 | \$14,833,005 | \$5,486,250 | \$400,000 | \$5,886,250 | \$2,194,500 | \$3,691,750 | 10.28 |

decreased by: 314,958 with 20% contingency \$7,063,500