

# Yolo County Housing Yolo County, California

May 24, 2017

## MINUTES

The Yolo County Housing met on the 24th day of May, 2017, in regular session in its Chambers in the Erwin W. Meier Administration Building, 625 Court Street, Woodland, California at 4:00 p.m.

Present: Will Arnold; Mark Johannessen; Pierre Neu; Karen Vanderford; Jennifer Wienecke-Friedman

Absent: Angel Barajas; Helen Thomson

Staff Present: Lisa Baker, CEO  
Hope Welton, Agency Counsel  
Janis Holt, General Managing Director  
Julie Dachtler, Clerk

### CALL TO ORDER

1. Pledge of Allegiance.
2. Consider approval of the agenda.

Minute Order No. 17-23: Approved agenda as submitted.

MOTION: Neu. SECOND: Arnold. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.

3. Public Comment: Opportunity for members of the public to address the Housing Authority on subjects not otherwise on the agenda relating to Housing Authority business. The Board reserves the right to impose a reasonable limit on time afforded to any topic or to any individual speaker.

There was no public comment.

## PRESENTATIONS

4. Presentation: Introduction of Ricardo Lopez, Client Services Coordinator Assigned to the ROSS Grant

Janis Holt, General Managing Director, introduced Ricardo Lopez, Client Services Coordinator assigned to the ROSS Grant.

5. Presentation: Certificate of Training in USDA Farm Labor Housing Occupancy to Roberto Guevara and to Tom Dogias

Janis Holt, General Managing Director, presented the Certificate of Training in USDA Farm Labor Housing Occupancy to Roberto Guevara and to Tom Dogias.

6. Certificate of Completion Award to Family Self-Sufficiency Graduate, Charlotte Baur

Janis Holt, General Managing Director, presented the Certificate of Completion Award to Family Self-Sufficiency Graduate, Charlotte Baur.

## CONSENT AGENDA

Minute Order No. 17-24: Approved Consent Agenda Item Nos. 7 - 8.

MOTION: Arnold. SECOND: Wienecke-Friedman. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.

7. Approval of Minutes from the meeting of April 19, 2017

Approved the minutes from the meeting of April 19, 2017 on Consent.

8. Review and Approve Information Sharing Memorandum of Understanding with Davis Police Department and Authorize the CEO to Execute (Holt, Baker)

Approved **Resolution No. 17-04** and **Agreement No. 17-03** on Consent.

## REGULAR AGENDA

9. Review and Approve Contract Award to Enterprise Fleet Management for Fleet Vehicle Leasing and Maintenance Services and Authorize the CEO to Execute (Holt, Ichtertz, Baker)

Minute Order No. 17-25: Approved recommended action.

MOTION: Neu. SECOND: Arnold. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.

10. Review and Approve the Purchase of Lighting and Water Conservation Improvements for non-HUD properties and Authorize the CEO to Execute Agreements (Gillette, Ichtertz, Baker)

Minute Order No. 17-26: Approved recommended action.

MOTION: Arnold. SECOND: Neu. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.

11. Review and Approve Resolution for the Purchase of Four Solar Power Arrays for Yolano Village, Donnelly Circle, Riverbend Senior Manor 1 and El Rio Villas and Authorize the CEO to Execute Agreements (Gillette, Baker)

Minute Order No. 17-27: Approved recommended action by **Resolution No. 17-05**.

MOTION: Vanderford. SECOND: Wienecke-Friedman. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.

12. Review, Approve and Authorize Resolution for Energy Performance Contract (EPC) for Energy Improvements in the Public Housing portfolio with Siemens as the Authorized Energy Services Company (ESCO) (Baker, Ichtertz)

Minute Order No. 17-28: Approved recommended action by **Resolution No. 17-06**.

MOTION: Arnold. SECOND: Neu. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.

13. Receive comments from CEO.

CEO Lisa Baker referred to the handout about recent activities. Under Finance she noted the 2016 audit finding eliminated the Interfund program finding and they now have a clean slate, which is big news. Under Management: moving to a new automated, on-demand human resources program, called BambooHR System; the Operational Area Emergency Operations Collaboration; Training and Homeless Roundtable and Housing Forum. Under Client Services she reported on Youth Leadership Training, Rec2Go Summer Partnership at Crosswood, Families Together Program at the West Sac Library, Shopping Carts for Winters seniors and disabled, and a collaboration with Yolo County Car Seat Safety Program to provide car seats to El Rio Villas residents who are pregnant or have children 0 to 3 years old. Under Operations she updated the Board about the Winters Water Well, and notification that the Housing Assistance is once again a national High Performing Program.

14. Receive comments from Commissioners.

No comments from the Commissioners.

**ADJOURNMENT**

Next meeting is scheduled June 28, 2017 at 4:00 p.m.

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Mark Johannessen, Chair  
Yolo County Housing

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Julie Dachtler, Clerk  
Yolo County Housing

# YOLO COUNTY HOUSING

## AGENDA

### REGULAR MEETING

May 24, 2017

4:00 p.m.



**YOLO COUNTY HOUSING**  
HOUSING COMMISSION

WILL ARNOLD  
ANGEL BARAJAS  
MARK JOHANNESSEN  
PIERRE NEU  
HELEN MACLEOD THOMSON  
KAREN VANDERFORD  
JENNIFER WIENECKE-FRIEDMAN

**BOARD OF SUPERVISORS CHAMBERS**  
625 COURT STREET, ROOM 206  
WOODLAND, CALIFORNIA 95695

LISA A. BAKER  
CHIEF EXECUTIVE OFFICER

HOPE WELTON  
AGENCY COUNSEL

## **Reminder: Please turn off cell phones.**

### **CALL TO ORDER**

1. Pledge of Allegiance.
2. Consider approval of the agenda.
3. Public Comment: Opportunity for members of the public to address the Housing Authority on subjects not otherwise on the agenda relating to Housing Authority business. The Board reserves the right to impose a reasonable limit on time afforded to any topic or to any individual speaker.

### **PRESENTATIONS**

4. Presentation: Introduction of Ricardo Lopez, Client Services Coordinator Assigned to the ROSS Grant
5. Presentation: Certificate of Training in USDA Farm Labor Housing Occupancy to Roberto Guevara and to Tom Dogias
6. Certificate of Completion Award to Family Self-Sufficiency Graduate, Charlotte Baur

### **CONSENT AGENDA**

7. Approval of Minutes from the meeting of April 19, 2017
8. Review and Approve Information Sharing Memorandum of Understanding with Davis Police Department and Authorize the CEO to Execute (Holt, Baker)

### **REGULAR AGENDA**

9. Review and Approve Contract Award to Enterprise Fleet Management for Fleet Vehicle Leasing and Maintenance Services and Authorize the CEO to Execute (Holt, Ichtertz, Baker)
10. Review and Approve the Purchase of Lighting and Water Conservation Improvements for non-HUD properties and Authorize the CEO to Execute Agreements (Gillette, Ichtertz, Baker)

11. Review and Approve Resolution for the Purchase of Four Solar Power Arrays for Yolano Village, Donnelly Circle, Riverbend Senior Manor 1 and El Rio Villas and Authorize the CEO to Execute Agreements (Gillette, Baker)
12. Review, Approve and Authorize Resolution for Energy Performance Contract (EPC) for Energy Improvements in the Public Housing portfolio with Siemens as the Authorized Energy Services Company (ESCO) (Baker, Ichtertz)
13. Receive comments from CEO.
14. Receive comments from Commissioners.

## ADJOURNMENT

Next meeting is scheduled June 28, 2017 at 4:00 p.m.

I declare under penalty of perjury that the foregoing agenda was posted May 19, 2017 by 5:00 p.m. at the following places:

- On the bulletin board at the east entrance of the Erwin W. Meier Administration Building, 625 Court Street, Woodland, California; and
- On the bulletin board outside the Board of Supervisors Chambers, Room 206 in the Erwin W. Meier Administration Building, 625 Court Street, Woodland, California; and
- On the bulletin board of Yolo County Housing, 147 West Main Street, Woodland, California.
- On the Yolo County website: [www.yolocounty.org](http://www.yolocounty.org).

Julie Dachtler, Clerk of the Board

By: \_\_\_\_\_  
Clerk

### NOTICE

If requested, this agenda can be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 and the Federal Rules and Regulations adopted in implementation thereof. Persons seeking an alternative format should contact the Clerk of the Board for further information. In addition, a person with a disability who requires a modification or accommodation, including auxiliary aids or services, in order to participate in a public meeting should telephone or otherwise contact the Clerk of the Board as soon as possible and at least 72 hours prior to the meeting. The Clerk of the Board may be reached at (530) 666-8195 or at the following address:

Yolo County Housing  
c/o Clerk of the Board of Supervisors  
County of Yolo  
625 Court Street, Room 204, Woodland, CA 95695

Yolo County Housing  
Yolo County, California

To: Co. Counsel ✓  
Yolo County Housing ✓

CONSENT CALENDAR

Excerpt of Minute Order No. 17-24 Item No. 7, of the Yolo County Housing meeting of May 24, 2017.

MOTION: Arnold. SECOND: Wienecke-Friedman. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.

7.

Approval of Minutes from the meeting of April 19, 2017

Approved the minutes from the meeting of April 19, 2017 on Consent.

# Yolo County Housing Yolo County, California

April 19, 2017

## MINUTES

The Yolo County Housing met on the 19th day of April, 2017, in regular session in its Chambers in the Erwin W. Meier Administration Building, 625 Court Street, Woodland, California at 4:00 p.m.

Present: Will Arnold; Angel Barajas; Mark Johannessen; Pierre Neu; Karen Vanderford;  
Jennifer Wienecke-Friedman

Absent: Helen Thomson

Staff Present: Lisa Baker, CEO  
Phil Pogledich, Agency Counsel  
Julie Dachtler, Clerk

### CALL TO ORDER

1. Pledge of Allegiance.
2. Consider approval of the agenda.

Minute Order No. 17-17: Approved agenda as submitted, noting there is an updated agreement for Agenda Item No. 8, Davis Pathways Project, and the proposed October meeting date should be the 25th, not the 26th.

MOTION: Neu. SECOND: Barajas. AYES: Barajas, Johannessen, Neu, Wienecke-Friedman. ABSENT: Arnold, Thomson, Vanderford.

3. Public Comment: Opportunity for members of the public to address the Housing Authority on subjects not otherwise on the agenda relating to Housing Authority business. The Board reserves the right to impose a reasonable limit on time afforded to any topic or to any individual speaker.

There was no public comment.

## PRESENTATIONS

4. Presentation from Siemens regarding Energy Performance Contract, MASH Solar and Non-HUD Energy Project

Received presentation from Siemens regarding Energy Performance Contract, MASH Solar and Non-HUD Energy Project.

## CONSENT AGENDA

Minute Order No. 17-18: Approved Consent Agenda Item Nos. 5 - 9.

MOTION: Barajas. SECOND: Wienecke-Friedman. AYES: Arnold, Barajas, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Thomson.

5. Approval of Minutes from the meeting of March 8, 2017

Approved the minutes from the meeting of March 8, 2017 on Consent.

6. Review and Approve Destruction of YCH Records in Accordance with Revised Records Retention Policy and Schedules (Holt and Gillette)

Approved recommended action on Consent.

7. Authorize YCH to Write Off Uncollectible Balances in the Amount of \$6,805.00 for the period ending March 31, 2017 (Gillette and Dogias)

Approved recommended action on Consent.

8. Review and Approve Agreement with City of Davis for Interim Bridge Rental Assistance and Services Related to Davis Pathways Project (Baker)

Approved **Agreement No. 17-02** on Consent.

9. Review and Approve Agent Resolution to Submit Storm Damage Claims (Gillette and Baker)

Approved recommended action on Consent.

## REGULAR AGENDA

10. Public Hearing Adopting Resolution Approving the Proposed FY 2017 Annual Plan Update and Authorize Submission to the Department of Housing and Urban Development (Holt and Baker)

Minute Order No. 17-19: Held public hearing and approved recommended action by **Resolution No. 17-03**.

MOTION: Arnold. SECOND: Neu. AYES: Arnold, Barajas, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Thomson.

11. Public Hearing Regarding the FY 2017 Capital Fund Annual Statement and Five-Year Plan, Review, Approve and Authorize the CEO to Execute with the U.S. Department of Housing and Urban Development (HUD) (Ichtertz and Holt)

Minute Order No. 17-20: Held public hearing and approved recommended action.

MOTION: Arnold. SECOND: Wienecke-Friedman. AYES: Arnold, Barajas, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Thomson.

12. Review and Approve Revised Annual Meeting Calendar for 2017 (Baker)

Minute Order No. 17-21: Approved the following revised annual meeting calendar for 2017:

- May 24
- June 28
- July 26
- August 23
- September 27
- October 25
- December 6

MOTION: Wienecke-Friedman. SECOND: Barajas. AYES: Arnold, Barajas, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Thomson.

13. Review and Approve Resolution Authorizing Ground Lease and Approve Ground Lease for the Property located at 180 W. Beamer to Mercy New Hope L.P. for purposes of Constructing Approximately 80 New Units of Affordable Housing and Authorizing the CEO to Execute (Baker)

Minute Order No. 17-22: Approved recommended action.

MOTION: Wienecke-Friedman. SECOND: Vanderford. AYES: Arnold, Barajas, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Thomson.

14. Receive comments from CEO Baker

CEO Lisa Baker asked the Commissioners to look for an email with an invitation to an upcoming emergency training course through FEMA. It is also opening day at the local migrant centers and Madison and Davis filled up on day one. A Commissioners Meeting Highlight Report was handed out to each Commissioner showing recent activities held by the YCH, including April Spring Fling, Coins 4 Carts fundraiser, where money was raised to purchase folding shopping carts for disabled elderly folks, convertible car seats for residents/families in El Rio Villas and a Girl Scout Gold Medal Project by Allegra Star in which she provided seasonal farm workers with handmade neck coolers. Also spoke of the Customer Care Survey Results chart, noting customer service has been valued in 80-90% by residents; however, there is still work to be done, in particular, with computer access. They are working hard to bridge that gap.

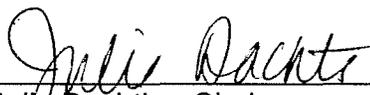
15. Receive comments from Commissioners

No comments from the Commissioners.

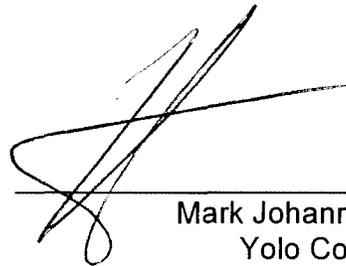
**ADJOURNMENT**

Adjourned in memory of Thomas Purtell, former District Attorney for Yolo County.

Next meeting is May 24, 2017.

  
Julie Dachtler, Clerk

Yolo County Housing



Mark Johannessen, Chair  
Yolo County Housing

Yolo County Housing  
Yolo County, California

To: Co. Counsel ✓  
Yolo County Housing ✓

CONSENT CALENDAR

Excerpt of Minute Order No. 17-24 Item No. 8, of the Yolo County Housing meeting of May 24, 2017.

MOTION: Arnold. SECOND: Wienecke-Friedman. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.

8.

Review and Approve Information Sharing Memorandum of Understanding with Davis Police Department and Authorize the CEO to Execute (Holt, Baker)

Approved **Resolution No. 17-04** and **Agreement No. 17-03** on Consent.



## ***Yolo County Housing***

147 W. Main Street  
WOODLAND, CA 95695

Woodland: (530) 662-5428  
Sacramento: (916) 444-8982  
TTY: (800) 545-1833, ext. 626

**DATE:** May 24, 2017  
**TO:** YCH Housing Commission  
**FROM:** Lisa A. Baker, CEO  
**PREPARED BY:** Janis Holt, General Director  
**SUBJECT:** **Review and Approve Resolution Adopting Memorandum of Understanding with the Davis Police Department**

### **RECOMMENDED ACTION**

That the Housing Commission:

1. Review and approve resolution adopting Memorandum of Understanding (MOU) between Yolo County Housing and the Davis Police Department; and
2. Authorize the CEO to execute the MOU; and
3. Authorize the CEO to implement immediately.

### **BACKGROUND/DISCUSSION**

The Department of Housing and Urban Development (HUD) requires public housing authorities to track, report and work to prevent crime. In order to meet these requirements, YCH has entered into cooperative agreements with local law enforcement agencies in order to ensure that affordable housing developments, public housing and housing subsidy households are safe environments for families. A strong partnership with local law enforcement can benefit both agencies and prevent incidents from becoming a continuing problem. Through mutual support, both agencies can work together at decreasing crime in their jurisdiction.

YCH and the City of Davis have worked together to create the Memorandum of Understanding (MOU) that will meet state and federal requirements and allow for improved information sharing between the City and YCH while respecting the rights of our residents. The original MOU template used initially in 2009 with the City of Woodland was developed in partnership with Legal Services of Northern California and reviewed by legal counsel for the Agency. It will be executed by the City of Davis Police Chief and YCH CEO.

Staff has enacted MOU's with the City of Woodland, City of Winters, and the Yolo County Sheriff's Department.

*Working together to provide quality affordable housing and community development services for all*

**FISCAL IMPACT**

No fiscal impact at this time.

**CONCLUSION**

Staff recommends that the Commission adopt and implement the Memorandum of Understanding between YCH and the Davis Police Department.

**Attachment:** Draft Resolution

MOU between YCH and the Davis Police Department

**FILED**

JUN 07 2017

YOLO COUNTY HOUSING  
RESOLUTION NO. 17-04

BY Julie Bache  
DEPUTY CLERK OF THE BOARD

(Resolution Adopting the Memorandum of Understanding between Yolo County Housing and the Davis Police Department)

**WHEREAS**, the U.S. Department of Housing and Urban Development ("HUD") requires public housing authorities to track, report, and work to prevent crime in order to ensure that developments are safe environments for residents; and

**WHEREAS**, a strong partnership with local law enforcement can benefit both agencies and help to prevent crime and enhance safety in the jurisdictions we serve;

**WHEREAS**, both parties agree a Memorandum of Understanding that meets state and federal requirements will allow for improved information sharing.

**NOW, THEREFORE, BE IT RESOLVED, ORDERED AND FOUND** by the Housing Commission of the Housing Authority of the County of Yolo, as follows:

1. The foregoing recitals are true and correct.
2. The Housing Commission hereby adopts by resolution the Memorandum of Understanding between Housing Authority of the County of Yolo ("YCH") and the Davis Police Department.

**EFFECTIVE DATES:** This Resolution shall take effect from and be implemented from and after the date of its adoption.

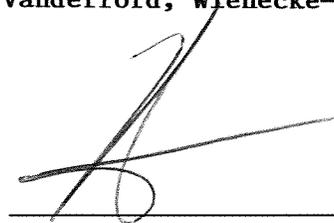
**PASSED AND ADOPTED**, by the Housing Commission of the Housing Authority of the County of Yolo, State of California, this 24<sup>th</sup> day of May, 2017 by the following vote:

AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman.

NOES: None.

ABSTAIN: None.

ABSENT: Barajas, Thomson.



Mark Johannessen, Chair  
Housing Commission of the

03117

01/13/17

OFFICE OF THE COUNTY CLERK

Housing Authority of the County of Yolo

Approved as to Form:

By Hope P. Welton  
Hope P. Welton, Agency Counsel

Attest:

Julie Dachtler, Agency Clerk  
Housing Commission of the  
Housing Authority of the County of Yolo

By Julie Dachtler



**FILED**

JUN 07 2017

BY *Jill's Packer*  
DEPUTY CLERK OF THE BOARD

**YOLO COUNTY HOUSING  
AGREEMENT NO. 17-03**

**Memorandum of Understanding  
Between  
Yolo County Housing  
And  
The Davis Police Department**

This Memorandum of Understanding ("MOU") is made this 26th day of April, 2017, and establishes a cooperative agreement between the Housing Authority of the County of Yolo (hereinafter referred to as "Yolo County Housing" or "YCH") and the Davis Police Department (hereinafter referred to as the "Department" or "DPD").

I. MISSIONS

- A. YCH mission: Working together to provide quality affordable housing and community development services for all.
- B. DPD mission: Dedicated to progressive policing with a commitment to protect and serve our community.

II. PURPOSE

The United States Department of Housing and Urban Development ("HUD") requires Public Housing Authorities ("PHA"), such as YCH, to track, report and work to prevent crime. PHA's are also required to enter into cooperative agreements with local law enforcement agencies in order to ensure that developments are safe environments for residents. A strong partnership with local law enforcement can benefit both agencies and prevent incidents from becoming a continuing problem. Through mutual support, both agencies can work together at decreasing crime in public housing.

III. DISCLOSURE OF INFORMATION

- A. As required by law or regulation, YCH will comply, on a case-by-case basis, with information requests from DPD regarding possible fugitive felons and/or parole or probation violators. YCH will supply, upon legitimate request by DPD, the following information of any recipient of assistance:
  - 1. Current address;
  - 2. Social Security number;
  - 3. Photograph (if applicable).

B. Except upon a showing of compelling (i.e. emergency) circumstances affecting the health or safety of an individual, all information requests by Davis PD to YCH shall be submitted:

1. In writing; and
2. On DPD letterhead; and
3. Signed by the Police Chief, or other designee(s) permitted by law; and
4. Identify the record desired and the law enforcement activity for which the record is sought.

#### IV. RESPONSIBILITIES

A. Yolo County Housing shall:

1. Screen public, affordable housing and housing choice voucher applicants and deny admission to applicants in accordance with and as permitted by law.
2. In its sole discretion, evict public or other affordable housing residents and terminate assistance to housing choice voucher participants as permitted by law.
3. Enforce lease and house rules.
4. Tow unregistered, inoperable, and/or abandoned cars in accordance with and as permitted by law.
5. Abate graffiti within twenty-four (24) hours.

B. Davis Police Department shall:

1. Provide permissible crime data to Real Estate Services and HCV staff for analysis and action.
2. After being served a lawful subpoena, testify in eviction cases as needed when law enforcement has responded to the residence for service.
3. Work with YCH staff to promote the Community Awareness and Support Teams (CAST) and resident liaisons, fostering neighborhood watch groups on YCH property and meeting with YCH residents as needed to address community concerns and strategize methods of enhancing community preparedness,



confirmation of delivery is obtained at the time of facsimile transmission.  
Service of notices sent by first class mail shall be deemed complete on the fifth (5<sup>th</sup>) day following deposit in the United States mail.

#### VIII. INDEMNIFICATION

YCH shall indemnify, defend and hold harmless the City of Davis, the Davis Police Department, its officers, agents, employees and volunteers, from any and all claims, demands, costs (including attorney fees), expenses, judgments, liability, loss, injury, or damages arising out of or in connection with the performance of this MOU by the City of Davis, the Davis Police Department, its employees, officers, agents or subcontractors, excepting only loss, injury, or damage caused by the negligence or willful misconduct of the City of Davis, the Davis Police Department, its officers, agents, subcontractors, employees or volunteers. The City of Davis and the Davis Police Department shall indemnify, defend and hold harmless the YCH, its officers, agents, employees and volunteers, from any and all claims, demands, costs (including attorney fees), expenses, judgments, liability, loss, injury, or damages arising out of or in connection with the performance of this MOU by YCH, its employees, officers, agents or subcontractors, excepting only loss, injury, or damage caused by the negligence or willful misconduct of the YCH, its officers, agents, subcontractors, employees or volunteers.

IX. AUTHORIZATION

The signing of this MOU is not a formal undertaking. It implies that the signatories will strive to reach, to the best of their ability, the objectives stated in the MOU.

On behalf of the organization I represent, I wish to sign this MOU and contribute to its further development.

**YOLO COUNTY HOUSING:**

By \_\_\_\_\_

Lisa A. Baker  
Executive Director  
Yolo County Housing



5/24/17

Date

**DAVIS POLICE DEPARTMENT:**

By \_\_\_\_\_

Darren Pytel  
Police Chief  
City of Davis Police Department

4-27-17

Date

Yolo County Housing  
Yolo County, California

Meeting Date: May 24, 2017

To: County Counsel ✓  
Yolo County Housing ✓

9.

Review and Approve Contract Award to Enterprise Fleet Management for Fleet Vehicle Leasing and Maintenance Services and Authorize the CEO to Execute (Holt, Ichtertz, Baker)

Minute Order No. 17-25: Approved recommended action.

MOTION: Neu. SECOND: Arnold. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.



## **Yolo County Housing**

147 W. Main Street  
WOODLAND, CA 95695

Woodland: (530) 662-5428  
Sacramento: (916) 444-8982  
TTY: (800) 545-1833, ext. 626

**DATE:** May 24, 2017  
**TO:** YCH Housing Commission  
**FROM:** Lisa A. Baker, CEO  
**PREPARED BY:** Janis Holt, General Director  
Fred Ichtertz, Facilities Director  
**SUBJECT:** **Review and Approve Contract Award to Enterprise Fleet Management for Fleet Vehicle Leasing and Maintenance Services**

### **RECOMMENDED ACTION**

That the Housing Commission:

1. Review and Approve Contract Award to Enterprise Fleet Management for Fleet Vehicle Leasing and Maintenance Services, and;
2. Authorize the CEO to Execute the Contract

### **BACKGROUND/DISCUSSION**

The YCH fleet is comprised of vehicles serving various operations' functions, including maintenance, facilities management, resident service coordination, and inspections. The current fleet is comprised of both passenger vehicles and maintenance trucks. Vehicle replacement standards vary depending on how the vehicle is used, mileage, and actual wear and tear. For example, the maintenance vehicle used for towing and campus clean up experiences higher wear and tear than one of the light maintenance trucks. YCH generally follows accepted industry standards. According to federal GSA Fleet Replacement Standards, vehicles should be replaced as follows:

- Light Trucks (4x2 or 4x4): 7 years or 65,000 miles
- Passenger Vehicles: 5 years and 60,000 miles

YCH has an aging fleet that has either exceeded expected years of service and/or exceeded the 65,000 miles. The age and condition of the vehicles has resulted in increased fleet maintenance costs. Those costs will only get higher over time. In addition, YCH works hard to maintain a safe work and safe living environment. Aging vehicles do not contribute to meeting these goals.

There are nine total vehicles in the YCH fleet. Eight of these vehicles currently meet the fleet vehicle replacement criteria: **five maintenance trucks and three passenger vehicles**. The final vehicle will meet the replacement criteria within two years and has, therefore, been included in the analysis.

Due to the small fleet size and ongoing, long term funding constraints, YCH has not had the ability to have a dedicated fleet manager. Attempts to self-manage in the past did not result in optimum performance for the Agency. As a result, YCH had entered into a shared-services, inter-agency agreement with the County of Yolo for fleet maintenance and repair services. The fleet services agreement is due to expire on June 30, 2017 and the County has informed YCH that it would be raising rates on fleet management. This increase would result in a four-fold increase in costs even without consideration of increased maintenance needs for an aging fleet.

As a result, staff was tasked with analyzing the YCH fleet, including the need for replacement vehicles, maintenance and repair costs and funding to meet needs. As a result of that analysis, staff determined the following:

Several factors impact the viability of replacing the aging fleet and continuation of fleet maintenance services:

- I. Budget constraints and changes in allowable use of funds to purchase new vehicles make it extremely difficult if not impossible for YCH to replace their aging vehicles in the way it has done so in the past.
- II. Increased costs of maintenance repairs for the aging fleet has impacted the budget due to unanticipated maintenance repair costs at \$30,000 over the last 2 years for nine vehicles.
- III. The County of Yolo Fleet Services has moved to a new calculation for administration and fuel services through a “fair share” proposal which would increase fleet maintenance services four times the current charges under a new inter-agency agreement. This cost increase is not viable for YCH to absorb.
- IV. **If** YCH could complete a vehicle replacement plan, it would require a minimum of five years to replace all aging vehicles which would most likely result in higher maintenance costs and could pose a future driver safety risk. In the event it was able to find funding to do so, the plan would be as follows:

Table I: *Approximate costs associated with five year vehicle replacement plan.*

Vehicle	2017	2018	2019	2020	2021
1994 Ford ½ ton	\$40,000				
2001 GMC Safari Van		\$35,000			
2008 Dodge 1-ton	\$45,000				
2010 Ford 3/4 ton		\$40,000			

2011 Hybrid Ford Fusion			\$32,000		
2011 Hybrid Ford Escape			\$40,000		
2012 Ford F-250 3/4 ton				\$40,000	
2012 Ford F-250 3/4 ton				\$40,000	
2012 Ford F-250 3/4 ton					\$40,000
Total Vehicle Replacement Approximate Cost	\$85,000	\$75,000	\$72,000	\$80,000	\$40,000
Approximate Fleet Maintenance Costs	\$12,500	\$12,500	\$12,500	\$12,500	\$12,500
<b>TOTAL</b>	<b>\$97,500</b>	<b>\$97,500</b>	<b>\$84,500</b>	<b>\$92,500</b>	<b>\$52,500</b>

As a result of this analysis, staff then explored alternatives to the plan for vehicle purchasing currently in place, such as vehicle leasing. In researching leasing options, staff discovered that the Sacramento Housing and Redevelopment Agency (SHRA) had recently completed a procurement process for a **five year vehicle leasing and fleet maintenance agreement** for 15 vehicles. SHRA highly recommended leasing over purchase in discussions with their staff.

The vendor selected through SHRA's process was Enterprise Fleet Management's Government Fleet Solutions. SHRA staff stated that they are very satisfied with the service received by Enterprise and their fleet maintenance vendors in the community. In addition to SHRA, Enterprise has government leasing contracts with several Northern California cities, counties, and independent districts. In accordance with HUD and with federal OMB procurement requirements, YCH is allowed to piggyback off of the completed procurement conducted by SHRA without having to conduct additional procurement.

To determine if SHRA's solution could be a financially viable option for YCH, staff invited Enterprise to provide a quote for our consideration for the leasing of five maintenance vehicles with design specifications (i.e. lift gates, emergency lighting, towing hitch, etc.) and three passenger vehicles (including one passenger van) under the SHRA procurement umbrella. The quote provided included fleet maintenance services with multiple local vendors in Yolo County. The quote provided is \$64,838/annually.

*Table II: Annual cost comparison between purchase and leasing.*

	Year 1	Year 2	Year 3	Year 4	Year 5
Vehicle Replacement Costs Including	\$97,500	\$97,500	\$84,500	\$92,500	\$52,500

Fleet Maintenance (standard plan)					
Leasing Including Fleet Maintenance (proposed Enterprise solution)	\$64,838	\$64,838	\$64,838	\$64,838	\$64,838
Annual Cost Savings	<b>\$32,662</b>	<b>\$32,662</b>	<b>\$19,662</b>	<b>\$27,662</b>	<b>(\$12,338)</b>

As outlined in the table above, leasing over purchase will save YCH approximately \$70,910 over the five year period. In addition to cost savings and included fleet maintenance services, leasing vehicles provides some additional advantages that directly improve tracking, safety and cost:

- Free Fleet management software is included that tracks directly with Enterprise;
- Shorter cycle than ownership is more cost effective for tires, fuel, etc.;
- Optional fuel card for cost efficient fuel purchasing (to replace County fuel card);
- Maintenance on newer vehicles is less which equals increased productivity as a result of reduced down time;
- Staff safety is improved;
- Staff morale improves with new vehicles they can trust in day-to-day operations;
- Consistent leasing costs can be better controlled in the budget without unexpected maintenance costs;
- Vehicle replacement every five years is consistent with standard industry practices.

Separately from YCH standard fleet, staff uses vehicles purchased and owned by the State of California in its Migrant Housing program. There have been no fleet purchases allowed in that program for almost a decade - several vehicles have been serviced out due to ongoing safety concerns. As a result, for the last several years, YCH has loaned two maintenance trucks from their fleet to the migrant program in order to keep the program operational. YCH charges the migrant program for the maintenance and fuel costs associated with those trucks.

Staff has been in communication with the State of California Housing and Community Development Office of Migrant Services about the option of leasing vehicles used at the three Migrant Centers managed by YCH and DHA. If approved by OMS, YCH may lease 2-3 additional vehicles through this five year contract.

If YCH does not replace its fleet management providers and does not replace its aging vehicles, there will be higher financial impacts to the agency that can be difficult to predict or measure, such as increased maintenance costs, operational risks associated with vehicle safety, and management of fleet maintenance services including required reporting.

Based on the staff analysis, it is recommended to replace the County fleet management with Enterprise Government Fleet Solutions and moving into leasing versus purchasing.

**FISCAL IMPACT:**

Existing vehicles will be sold by Enterprise to provide funding for leasing of new vehicles, prepared to YCH specifications. Enterprise will track vehicle use and resell vehicles within the 5 year window to provide funding for new vehicles.

Costs for the leasing option will be included in the FY 2018 budget and subsequent budgets for the life of the agreement up to five years. The costs will be spread across operations throughout the portfolio based on vehicle use and assignment.

**CONCLUSION:**

Review and Approve Contract Award to Enterprise Fleet Management for Fleet Vehicle Leasing and Maintenance Services and Authorize the CEO to Execute the Five Year Contract



## Yolo County Housing Authority

### Equity Lease Menu Pricing

Vehicle Type	Year	Make	Model	Trim Level	Quantity	Term	Estimated Annual Mileage	Monthly Cost (Lease Payment)	Full Maintenance	Annual Cost Including Maintenance	Annual Cost by Quantity
1/2 Ton Pickup Quad 4x2	2017	Nissan	Rogue Hybrid	SV 4dr Front-wheel Drive	1	60	10000	\$437.74	\$46.47	\$5,810.52	\$5,811
1/2 Ton Pickup Quad 4x2	2017	Ford	Fusion Hybrid	SE 4dr Front Whhel Drive	1	60	10000	\$400.29	\$46.47	\$5,361.12	\$5,361
1/2 Ton Pickup Ext 4x2	2017	Chevy	Express 2500	2500 LS Rear-wheel Drive Passenger Van	1	60	10000	\$404.35	\$42.11	\$5,357.52	\$5,358
3/4 Ton Pickup Quad 4x2	2017	Ford	F-250 Regular Cab	* 4x2 SD Regular Cab 8 ft. box 142 in. WB SRW	5	60	10000	\$628.13		\$7,537.56	\$37,688
1 Ton Pickup Quad 4x2	2017	Ford	F-350 Regual Cab	* XL 4x2 SD Regular Cab 8 ft. box 142 in. WB SRW	1	60	10000	\$885.07		\$10,620.84	\$10,621
<b>Total Number of Vehicles</b>					<b>9</b>						

**Total Annual Payment**

**\$64,838**

Lease rates are based upon 2017 factory order pricing and miles per year

Maintenance includes one sets of brakes ever 26,000 miles and no tires

Pricing includes CA use tax

Pricing includes \$70,000 in equity spread across the 12 vehicles

# Fleet Management Solution



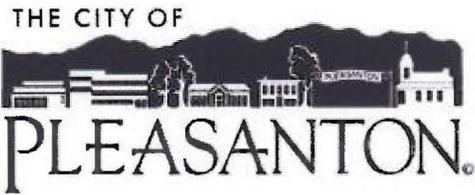
Presented By:  
Tony Blankenship- Fleet Consultant  
(916) 787-4796  
[Tony.L.Blankenship@efleets.com](mailto:Tony.L.Blankenship@efleets.com)



# A Few CA Government Clients



CITY of NAPA

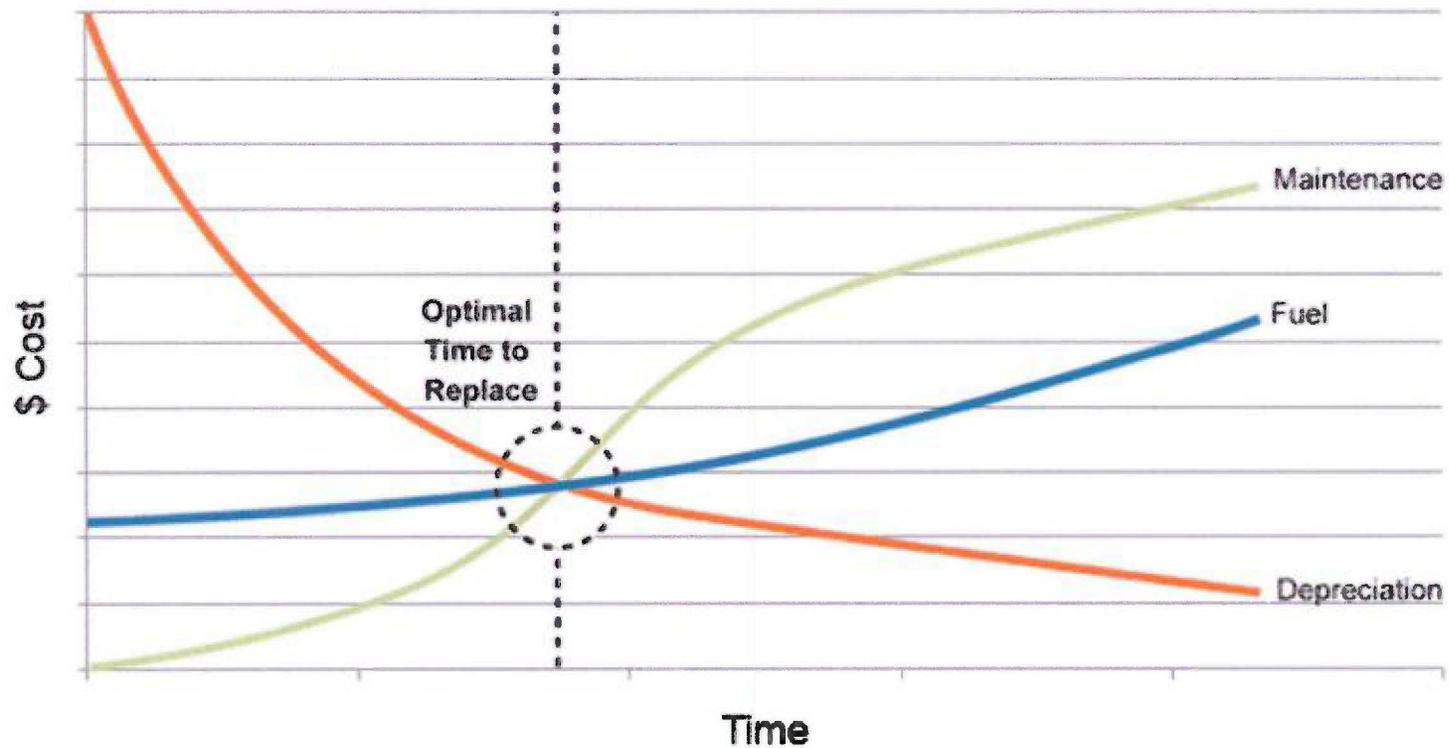


# Fleet Management is One Core Principle

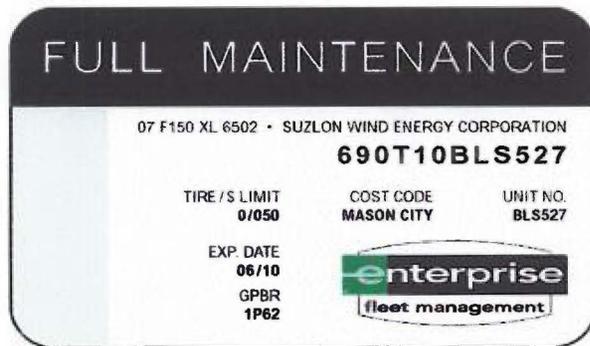


Our goal is to reduce your total cost of operating your fleet of vehicles and take the administrative burden away from your staff so they can focus on your primary mission. These are five areas that our team will focus on to reduce your annual transportation budget.

## The Cornerstone of Reducing Costs and Increasing the Efficiency of Your Fleet is Having an Effective Life Cycle



# Operational Solutions



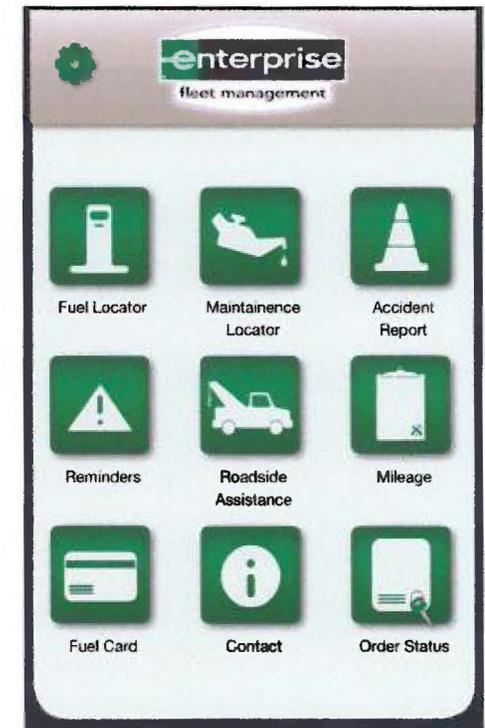
Tracked, Managed, Fixed, &  
Budgeted Maintenance.

24/7 Roadside Assistance

65,000+ Service Centers  
Nationwide



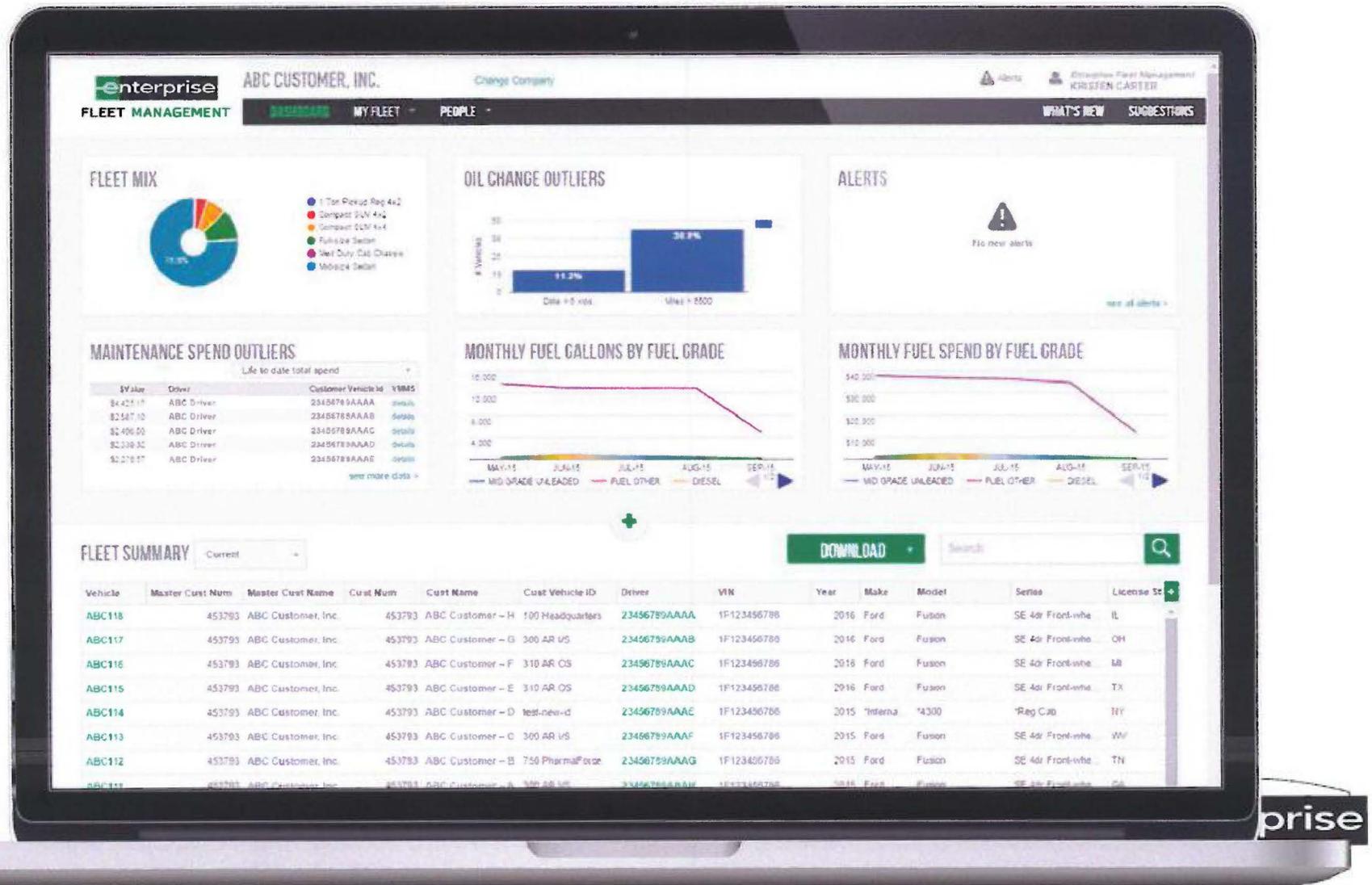
Fuel card for virtually all  
gas stations that accept  
credit cards.



Mobile Application for  
All Driver Needs.



# Fleet Management Software is Included Free



# Our Account Team Makes it Easy-

Our job is to keep your fleet cost down by analyzing the vehicle market and providing you with proper recommendations based on your vehicles and mileage patterns.

**Fleet Consultant-** designs initial fleet plan by uncovering opportunities hidden within current fleet expenses

**Account Managers** proactively manages, reviews, and implements chosen fleet program year over year

**Account Fleet Coordinator-** primary contact for drivers, Accounts Payable, and others who need answer to questions immediately



Yolo County Housing  
Yolo County, California

Meeting Date: May 24, 2017

To: County Counsel ✓  
Yolo County Housing ✓

10.

Review and Approve the Purchase of Lighting and Water Conservation Improvements for non-HUD properties and Authorize the CEO to Execute Agreements (Gillette, Ichtertz, Baker)

Minute Order No. 17-26: Approved recommended action.

MOTION: Arnold. SECOND: Neu. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.



## ***Yolo County Housing***

**Lisa A. Baker, Chief Executive Officer**

147 W. Main Street      Woodland: (530) 662-5428  
WOODLAND, CA 95695      Sacramento: (916) 444-8982  
TTY: (800) 545-1833, ext. 626

DATE:            May 24, 2017  
TO:              YCH Housing Commission  
FROM:          Lisa A. Baker, CEO  
                    James D. Gillette, Finance Director  
SUBJECT:      **Review and Approve the Purchase of Lighting and Water Conservation  
Improvements for Non-HUD properties and Authorize the CEO to Execute  
Agreements**

### **RECOMMENDED ACTIONS:**

That the Housing Commission:

- 1) Review and approve the attached for lighting and water conservation improvements;  
and
  
- 2) Authorize the CEO to execute the final version with review and approval of final  
agreement language by legal counsel.

### **BACKGROUND / DISCUSSION:**

In 2013, the Housing Commission set out to improve energy efficiency by taking advantage of the Energy Performance Contract financing program through HUD for its public housing sites. Since that time, this initial plan has morphed into a portfolio-wide program with three basic structures:

1. **Solar Arrays:** Financed with debt repaid by monthly utility cost (discussed in detail below)
2. **HUD Energy Performance Contract (EPC):** Lighting and water conservation

Working together to provide quality affordable housing and community development services for all

improvements on public housing sites financed with debt repaid by the savings generated by the improvements (discussed in a separate report).

3. **Non-HUD:** Lighting and water conservation improvements to non-HUD properties financed with a combination of debt and reserves repaid by the savings generated by the improvements.

This third project is comprised of lighting and water conservation improvements to YCH's main Administration building, both Helen Thomson homes, the seven Davis Solar homes, plus water meters for some public housing sites. See detailed scope of work in Exhibit A to the attached agreement for additional information.

The cost of this project is \$374,563 comprised of the following sub-projects:

<u>Sub-Project</u>	<u>Cost</u>	<u>Notes/Comments</u>	<u>Funding Source</u>
Davis Solar Homes	\$ 13,349	water conservation	Op Reserves
Helen Thomson Homes	16,068	lighting & water conservation	Op Reserves
Admin Building	123,053	lighting & water conservation	FNB Loan
Water Meters	222,093	various public housing	Capital Fund
Total	\$ 374,563		

As noted in the table above, the lighting and water conservation improvements for the Davis Solar and Helen Thomson homes will be funded through operations or operational reserves due the size of these projects.

First Northern Bank of Dixon has provided tentative approval for an equipment loan to fund the lighting and water conservation improvements to the Administration building. This loan will be repaid through operational savings related to the utility and maintenance cost savings and operations costs. The specific details of this loan are still being negotiated and staff anticipates that the structure of this equipment loan will not require Section 30 approval from HUD since there is no financing of federalized property, but confirmation of this from the HUD field office in San Francisco is still pending.

The final sub-project noted in the table is for installing water meters at a number of public housing sites in order to encourage water conservation by billing individual tenants for their actual water usage. This improvement will be funded through the Capital Fund Grant program. HUD has already approved this use of Capital Funds and the proposed expenditure has been included in the Commission approved Agency Plan and Capital Fund Plan.

**FISCAL IMPACT:**

The total cost of these improvements is expected to be repaid over time with the cost savings from lighting and water conservation improvements. This payback timing varies by the improvement type and actual savings realized with the majority of these funds repaid within 10 years.

Since these improvements provide a long-term benefit and are significant enough to be capitalized, the savings will be reflected in future budgets while the costs will be included as fixed assets on the statement of position (formerly known as the balance sheet).

**CONCLUSION:**

Staff recommends that the Commission authorize the CEO to execute the final version of the Installation agreement and any related financing documents for the Admin Building after review and concurrence of legal counsel.

Attachments: Non-HUD Installation Agreement

# SIEMENS INDUSTRY, INC., BUILDING TECHNOLOGIES DIVISION

## INSTALLATION AGREEMENT

NUMBER

THIS **AGREEMENT**, is made this \_\_\_\_ day of \_\_\_\_\_, 2017, by and between Siemens Industry, Inc., Building Technologies Division ("SIEMENS") and the party identified below as CLIENT and effective as of the \_\_\_\_ day of \_\_\_\_\_, 2017, ("Effective Date").

	<b>PROJECT: YCH NON HUD AND WATER METERS No.44OP-201340</b>
<b>CLIENT NAME AND ADDRESS:</b> Yolo County Housing 147 West Main St. Woodland, CA 95695  <b>DESIGNATED REPRESENTATIVE:</b> Lisa Baker <b>PHONE:</b> (530) 662-5428 <b>FAX:</b>	<b>SIEMENS INDUSTRY, INC., BUILDING TECHNOLOGIES DIVISION (SIEMENS)</b> <b>1000 Deerfield Parkway</b> <b>Buffalo Grove, IL 60089</b>  with office s at: 25821 Industrial Blvd. Ste. 300 Hayward, CA 94545  <b>DESIGNATED REPRESENTATIVE:</b> <b>PHONE:</b> <b>FAX:</b>

### AGREEMENT TERMS

**ARTICLE 1: ENGAGEMENT:**

- 1.1 CLIENT hereby engages and SIEMENS hereby accepts the engagement to perform and provide the services (collectively the "Work") set forth in Exhibit A pursuant to this Installation Agreement (the "Agreement") and in accordance with the terms and conditions of this Agreement.
- 1.2 SIEMENS shall perform the Work as an independent contractor with exclusive control of the manner and means of performing the Work in accordance with the requirements of this Agreement. SIEMENS has no authority to act or make any agreements or representations on behalf of CLIENT. This Agreement is not intended, and shall not be construed to create, between CLIENT and SIEMENS, the relationship of principal and agent, joint venturers, co-partners or any other such relationship, the existence of which is hereby expressly denied. No employee or agent of SIEMENS shall be, or shall be deemed to be, an employee or agent of CLIENT.
- 1.3 SIEMENS represents that it is duly authorized to do business in all locations where the Work is to be performed.
- 1.4 CLIENT represents, warrants and covenants to SIEMENS that (a) it has all requisite corporate power and/or statutory authority to enter into this Agreement, and that its execution hereof has been duly authorized and does not and will not constitute a breach or violation of any of CLIENT's organizational documents, any applicable laws or regulations, or any agreements with third parties; (b) it has done and will continue to do all things necessary to preserve and keep in full force and effect (i) its existence and (ii) the Agreement; (c) this Agreement is the legal, valid and binding obligation of the CLIENT, in accordance with its terms, and all requirements have been met and procedures have been followed by CLIENT to ensure the enforceability of the Agreement; and (d) there is not pending, or to CLIENT's best knowledge, threatened, suits, actions, litigation or proceedings against or affecting CLIENT that affect the validity or enforceability of this Agreement.

**ARTICLE 2: TIME OF PERFORMANCE AND TERM OF AGREEMENT:**

- 2.1 SIEMENS shall perform and complete all Work under the Agreement in accordance with the schedule set forth in Exhibit A.

**ARTICLE 3: COMPENSATION/TERMS OF PAYMENT:**

- 3.1 As full consideration for the performance of the Work, CLIENT shall pay to SIEMENS the Contract Sum stated in Exhibit B in such manner as agreed in Exhibit B and in accordance with the payment terms and conditions established by this Agreement.

**ARTICLE 4: CONTRACT DOCUMENTS:**

4.1 This Agreement shall consist (and are collectively referred to as "Agreement") of the following documents which are acknowledged by CLIENT and SIEMENS and incorporated herein by this reference:

- SCOPE OF WORK AND SERVICES, EXHIBIT A
- PAYMENT SCHEDULES, EXHIBIT B
- GENERAL CONDITIONS EXHIBIT C
- UTILITY DATA AND SAVINGS CALCULATIONS, EXHIBIT D and Appendices thereto.

4.2 In the event of any inconsistency between the provisions of the Agreement, the inconsistency shall be resolved by giving precedence in the order listed below.

- Agreement
- Exhibit A
- Exhibit B
- Exhibit C
- Exhibit D

AGREED FOR CLIENT:	AGREED FOR SIEMENS INDUSTRY, INC. (SIEMENS):
SIGNATURE BY: _____ DATE: _____	SIGNATURE BY: _____ DATE: _____
PRINT NAME & TITLE: _____	PRINT NAME & TITLE: _____
	SIGNATURE BY: _____ DATE: _____
	PRINT NAME & TITLE: _____

**SIEMENS INDUSTRY, INC., BUILDING TECHNOLOGIES DIVISION**

*SCOPE OF WORK AND SERVICES - EXHIBIT A*

**Article 1: Scope of Work**

1.1 *Description:* Except as otherwise expressly provided herein, SIEMENS shall provide each and every item of cost and expense necessary for:

- Interior/Exterior Lighting Upgrades
- Water Conservation Retrofits
- Water meter installations

1.2 *Specific Elements:* The Work shall include the following:

**1.2.1 INTERIOR / EXTERIOR BUILDING LIGHTING UPGRADE**

**1.2.1.1 Replace Older Lighting Technologies with LED Lamps**

SIEMENS shall:

1. Provide lighting upgrades as shown in Exhibit D – Appendix 1
2. Lighting upgrades will occur at the following sites listed in Table 1 below:

<b>Site</b>
Yolo County Housing Main office
Helen Thomson Home A
Helen Thomson Home B
Davis Solar Homes

3. Linear Fluorescent Lights to LED Conversion:
  - a. Replace the existing magnetic and electronic ballasts and T12 or T8 lamps identified in Exhibit D- Appendix 1 with new direct wired LED lamps with no ballast. Dispose of removed lamps and ballasts.
4. Compact Fluorescent to LED Conversions
  - a. Remove and re-lamp or replace CFL fixtures identified in Exhibit D- Appendix 1 with new LED ballast compatible PL Lamp.
  - b. Dispose of removed fixture, lamps and ballasts.
5. Incandescent to LED Conversions
  - a. Remove and re-lamp incandescent fixtures identified in Exhibit D- Appendix 1 with new LED A Lamps
  - b. Dispose of removed lamps.
6. Fluorescent Circline fixtures to LED
  - a. Remove and retrofit existing circline fluorescent lamp fixtures identified in Exhibit D- Appendix 1 with new LED retrofit kits
  - b. Dispose of removed lamps or fixtures.
7. High intensity discharge to LED
  - a. Remove and re-lamp or replace HID fixtures identified in Exhibit D- Appendix 1 with one of the following LED solutions:

- i. New LED Retrofit Kit
    - ii. New LED Fixture
  - b. Dispose of removed lamps or fixtures.
8. Work to be installed in accordance with the applicable Title 24 code requirements.
9. Work shall be performed during normal business hours (Monday through Friday 9:00 am to 6:00 pm). Weekends or overtime hours are not included in our labor assumptions.
10. Co-ordinate with the PG&E prior to installation for rebates inspections and provide paperwork per rebate requirements. (Only for exterior lighting under A1X commercial rate schedule. There are no rebates anticipated for lighting under residential (E1) rate schedules).
11. Pricing is based on all the above scope of work awarded as one contract.

## 12. EXCLUSIONS

- a. The scope for this FIM is based on the lighting retrofits described above and as shown in Exhibit D- Appendix 1. If SIEMENS finds areas which have existing low light levels that do not meet the Code, SIEMENS will provide recommendations to CLIENT for addressing those light level issues in the form of a change order(s) proposal which will include the scope of additional work, savings estimates, permits (if required) and pricing. Post-implementation lighting levels will be documented after final completion, with the results provided to CLIENT.
- b. SIEMENS shall not be responsible for repairs to existing damaged ceiling tiles or walls. Repairs or upgrades to existing drop ceilings or fixture supports to bring them up to local building codes are not included.
- c. SIEMENS scope is limited to replacing the fixtures identified in Exhibit D- Appendix 1 or working inside the fixtures identified therein. Correction of any pre-existing defects or non-conformities with the applicable Codes in the electrical wiring to the fixture is not included.
- d. Since the incentives are paid for by a third party (PG&E), SIEMENS cannot guarantee the incentives, but will provide work necessary in a timely manner to help to secure the funds. The CLIENT acknowledges that: (i) any incentive that may be available to the CLIENT to pay the costs of the work will be granted by a third party outside the control of SIEMENS; (ii) lack of availability of such incentives shall not relieve the CLIENT of its payment obligations under this Agreement.
- e. Entire scope was priced as universal voltage (120/277V), 480V fixtures/drivers are not included in the scope.
- f. Emergency circuits/drivers are not included. If additional LED emergency drivers are needed, SIEMENS will submit a change order proposal to the CLIENT.
- g. Scope assumes 1 for 1 retrofit and or replacement only, any change in layout or unforeseen electrical issues are not included in the scope.

- h. Standard manufacturer's warranty applies to all specified product.
- i. Design services i.e. CAD drawings/reflective ceilings plans are not included in the scope of work.
- j. Calibration of existing sensors is not included.
- k. Replacement of existing cracked or discolored fixture lenses is not included except in areas with fixture replacements shown in Exhibit D- Appendix 1.
- l. Any extra or spare parts are not included.
- m. Lighting control acceptance testing is not included.
- n. Any dimmable ballast that was not identified in Exhibit D- Appendix 1 is not included
- o. Any room(s)/floor (s) or area not identified in Exhibit D- Appendix 1 are not included
- p. Repair, replacement or re-commissioning of existing damaged, defective, or obsolete motion sensors, time clocks, switches or energy management systems are not included.
- q. The repair or replacement of fixture locking devices, for example, tamperproof screws or locking fastener type lens or door frame, is not included.
- r. Spaces such as storage rooms and small storage closets are excluded from the project scope.

### 1.2.2 **WATER CONSERVATION**

SIEMENS shall:

1. Provide water conservation upgrades as shown in Exhibit D – Appendix 2
2. Water conservation upgrades will occur at the following sites listed in Table 2 below.

**Table 2: Water Conservation Upgrades**

<b>Sr. No</b>	<b>Site</b>
1	Yolo County Housing Main office
2	Helen Thomson Home A
3	Helen Thomson Home B
4	Davis Solar Homes

3. Remove and replace existing plumbing fixtures identified in Exhibit D- Appendix 2 with at least one of the following Low Flow Fixtures:
  - i. Installation of new ultra high efficiency Stealth 0.8 GPF tank toilet
  - ii. General Purpose Faucet - Installation of 1.5 GPM flow restrictor
  - iii. Restroom - Installation of 1.0 GPM laminar flow restrictor
  - iv. Showers - Replace with new low flow shower heads
4. Dispose of removed fixtures.
5. Work shall be performed during normal business hours (Monday through Friday 9:00 am to 6:00 pm). Weekends or overtime hours are not included in our labor assumptions.

6. Pricing is based on all the above scope of work awarded as one contract.
7. Exclusions :
  - a. Pricing is based on repair and maintenance for like-in-kind fixtures only. Any additional work for repair and replacement of defective piping, leaking valve stops and other items not including the fixtures identified in Exhibit D- Appendix 2 will be additional cost items.
  - b. Pricing does not include any scope of work related to meeting ADA compliance for spaces such as hand rails, expansion of stalls etc.
  - c. Repair or replacement of broken flanges and angle stops are excluded from this scope of work.
  - d. Painting, tile work, and wall repair outside of footprint related patching are excluded from our price. Pre-existing damage to walls or flooring will be brought to the attention of CLIENT and the best course of action will be determined.
  - e. There are no rebates anticipated for this scope of work from the water utilities. Pricing does not include any co-ordination and paperwork for rebates.

### 1.2.3 Water meters Installation

SIEMENS shall:

1. Install new water meters for the Yolo County Housing HUD sites as detailed in Table 3.
2. The proposed model for installed meters is E25P E-Series ultrasonic meters with Stainless Steel Housing and Nicor connectors.
3. The locations, quantity and size of water meters to be installed is detailed in Table 3 below:

**Table 3: Water meter installation**

AMP	Site	# Units	# of meters to be installed	Meter size
AMP 1	Ridgecut Homes	10	10	All 5/8" X 3/4" Meters (1 per Unit)
	Yolito	10	10	All 5/8" X 3/4" Meters (1 per Unit)
AMP-2	El Rio Villa 1	30	30	All 5/8" X 3/4" Meters (1 per Unit)
	El Rio Villa 2	26	24	5/8" X 3/4" Meters (22 Units); 1" Meters (2 Units)
	El Rio Villa 3	50	50	All 5/8" X 3/4" Meters (1 per Unit)
	El Rio Villa 4	18	18	All 5/8" X 3/4" Meters (1 per Unit)

Exhibit A - Scope of Work and Services  
 Yolo County Housing

	Vista Montecito	16	16	All 5/8" X 3/4" Meters (1 per Unit)
	<b>TOTAL</b>	<b>160</b>	<b>158</b>	

ASSUMPTIONS, CLARIFICATIONS AND EXCLUSIONS

4. Work shall be performed during normal business hours (Monday through Friday 9:00 am to 6:00 pm). Weekends or overtime hours are not included in our labor assumptions.
5. The pricing covers charges for cellular transmitter equipment included with the water meters packages for a period of one year from substantial completion of the water meter installation.
6. The pricing will also cover one-time setup charges including:
  - a. BEACON engagement fee
  - b. Set-up and activation of the customer's BEACON AMA portfolio and initial licensing of the BEACON AMA software.
  - c. BEACON AMA Intro training course.
  - d. BEACON data exchange training course.
  - e. One year BEACON subscription fee which includes hourly data transmission, once daily call-in and EyeONWater consumer web portal and smartphone-tablet app.
7. The CLIENT is expected to have a working smart-phone or a tablet with internet connection to be able to receive the data transmitted by the cellular transmitters of water meters.
8. Pricing is based on all the above scope of work awarded as one contract.
9. SIEMENS shall not be responsible for any subscription fees for cellular transmitter equipment after the expiration of one year from substantial completion of the water meter installation, and the CLIENT must engage with the BEACON service providers for all subsequent subscription fees after that period.
10. The locations of all underground water lines, including outside locations of the water lines servicing each building, shall be provided by CLIENT.
11. All installations of water meters will be performed in areas that do not have concrete. No concrete demolition or restoration work is included in the Project scope.
12. It is assumed that all existing service lines are at a depth of 1-2 feet; if it is determined that the existing service lines are located deeper, SIEMENS will seek an equitable adjustment to its compensation pursuant to Section 5.1 of the Agreement.
13. SIEMENS has done its due diligence to verify that the meter quantities listed in Table 3 above are accurate, and CLIENT is in agreement with these quantities. If any changes in water meter quantities occur after the execution of this Agreement, SIEMENS will seek equitable adjustment under Section 5.1 of the Agreement.

14. SIEMENS will be responsible for line breaks within 2-feet of the proposed meter location, while the CLIENT will be responsible for line breaks outside of this area, unless the break results from the negligent acts of SIEMENS, or its subcontractors, in which case SIEMENS will be responsible for said repair.
15. A successful and complete meter installation is defined as any meter installed to manufacturer specifications where the data has been accurately transferred into utility billing database and reads one or more times via cellular transmitter, as necessary.
16. Any repairs or upgrades to the existing system required by the applicable inspecting authority are excluded. In the event SIEMENS is required to perform such work, SIEMENS will seek equitable adjustment under Section 5.1 of the Agreement.

## Article 2: Work Implementation Period

- 2.1 Commencement of Work (select **one**):
  - 2.1 SIEMENS shall commence the Work within thirty (30) days of contract execution, shall perform the Work diligently and shall complete the Work within 12 months of commencement.

## Article 3: Scope of Services-Maintenance Services Program

- CLIENT has elected to self-implement maintenance. Therefore SIEMENS shall not perform any on-going maintenance services, although the Parties may negotiate a separate agreement for such services at a later date.

By signing below, this Exhibit A is attached to and made a part of the Agreement between CONTRACTOR and the PHA.

**PHA:** **Yolo County Housing**  
Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**CONTRACTOR:** **Siemens Industry, Inc.**  
Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**Yolo Non HUD Lighting Savings Summary**

**Interior Lighting**

Site	Baseline fixtures	Existing kWh	Proposed fixtures	Proposed kWh	Energy Savings (kWh)	Energy Rate	Cost Savings
Helen Thomson A	12	440.2	12	194.9	245.3	\$ 0.19979	\$ 49.00
Helen Thomson B	26	1,261.8	26	361.2	900.6	\$ 0.19979	\$ 179.94
Yolo Main Office	217	13,825.9	217	6,132.4	7,693.5	\$ 0.22000	\$ 1,692.56
<b>TOTALS</b>	<b>243</b>	<b>15,087.7</b>	<b>243</b>	<b>6,493.6</b>	<b>8,594.1</b>		<b>\$ 1,872.50</b>

**Exterior Lighting**

Site	Baseline fixtures	Existing kWh	Proposed fixtures	Proposed kWh	Energy Savings (kWh)	Energy Rate	Cost Savings
Helen Thomson A	4	317.76	4	105.02	212.7	\$ 0.19979	\$ 42.50
Helen Thomson B	3	258.3	3	155.8	102.5	\$ 0.19979	\$ 20.48
Yolo Main Office	40	24891.1	40	7453.8	17,437.3	\$ 0.22000	\$ 3,836.21
<b>TOTALS</b>	<b>43</b>	<b>25,149.4</b>	<b>43</b>	<b>7,609.6</b>	<b>17,539.8</b>		<b>\$ 3,856.68</b>

**Notes:**

Commercial (A1) Non time of use rate schedule - Summer \$ 0.2473 per kWh

Commercial (A1) Non time of use rate schedule - Winter \$ 0.1927 per kWh

**Average A1 rate schedule \$ 0.22000 per kWh**

**Base Residential (E1) rate schedule \$ 0.19979 per kWh**

YCH Main office is under commercial (A1) rate schedule  
Helen Thomson Homes A, B are under residential (E1) rate schedule

YOLO NON-HUD Interior/ common area lighting

YOLO NON-HUD Interior/ common area lighting														
SITE INFORMATION				FIXTURE					PROPOSED FIXTURE DATA					SAVINGS
Location	Area type	Audit Code	ECM Code	Existing Description	Existing Qty	Existing Fixture Watts	Existing Operating Hours	Existing kWh/yr	Proposed Description	Proposed Qty	Proposed Fixture Watts	Proposed Operating Hours	Proposed kWh/yr	Energy Savings (kWh)
Helen Thomson Home A House	Kitchen	DBCFL23x2		relamp plug in 2 lamp cfl with LED	1	54	1460	78.84	Relamp fixture w/ (2) PL LED lamps	1	16	1460	23.36	55.48
Helen Thomson Home A House	Kitchen	CAN-13X1-PI-VER-6"		retrofit 6" can fixture with LED kit	5	15	1460	109.5	Retrofit fixture with 6" LED can kit	5	13	1460	94.9	14.6
Helen Thomson Home A House	Garage	K23CFL-E26		relamp plug in 1 lamp cfl with LED	1	24	365	8.76	Relamp fixture w/ (1) PL LED lamps	1	12	365	4.38	4.38
Helen Thomson Home A House	Dining Rm	ZFAN23CFLx3-E26		relamp plug in 2 lamp cfl with LED	1	72	730	52.56	Relamp fixture w/ (2) PL LED lamps	1	24	730	17.52	35.04
Helen Thomson Home A House	Hallway	DBCFL23x2		relamp plug in 2 lamp cfl with LED	1	54	1095	59.13	Relamp fixture w/ (2) PL LED lamps	1	16	1095	17.52	41.61
Helen Thomson Home A House	Bedroom 2	DBCFL23x2		relamp plug in 2 lamp cfl with LED	1	54	1095	59.13	Relamp fixture w/ (2) PL LED lamps	1	16	1095	17.52	41.61
Helen Thomson Home A House	Bedroom 2 Restroom	EDECO23CFL E26120-6"		relamp plug in 2 lamp cfl with LED	1	33	1095	36.135	Relamp fixture w/ (2) PL LED lamps	1	9	1095	9.855	26.28
Helen Thomson Home A House	Hallway Restroom	EDECO23CFL E26120-6"		relamp plug in 2 lamp cfl with LED	1	33	1095	36.135	Relamp fixture w/ (2) PL LED lamps	1	9	1095	9.855	26.28
Helen Thomson Home B	Hallway (Interior Entry Wav)	CAN-23X1SB-VER-6"-P38		retrofit 6" can fixture with LED kit	2	23	1095	50.37	Retrofit fixture with 6" LED can kit	2	13	1095	28.47	21.9
Helen Thomson Home B	Kitchen	CAN-23X1SB-VER-6"-P38		retrofit 6" can fixture with LED kit	3	23	1460	100.74	Retrofit fixture with 6" LED can kit	3	13	1460	56.94	43.8
Helen Thomson Home B	Kitchen	CAN-13X1-PI-VER-6"		retrofit 6" can fixture with LED kit	3	15	1460	65.7	Retrofit fixture with 6" LED can kit	3	13	1460	56.94	8.76
Helen Thomson Home B	Laundry	D32CIR		new drum 11" 2x13pl	1	40	365	14.6	new drum 11" 2x13pl	1	10	365	3.65	10.95
Helen Thomson Home B	Garage	K26CFL-E26		relamp plug in 1 lamp cfl with LED	1	33	365	12.045	Relamp fixture w/ (1) PL LED lamps	1	12	365	4.38	7.665
Helen Thomson Home B	Restroom- common	CAN-13X1-PI-VER-6"		retrofit 6" can fixture with LED kit	1	15	1095	16.425	Retrofit fixture with 6" LED can kit	1	13	1095	14.235	2.19
Helen Thomson Home B	Restroom	G60		screw LED 9.5 watt A Lamp	4	60	1095	262.8	Relamp fixture w/ screw in 9.5 watt LED A lamp	4	9.5	1095	41.61	221.19
Helen Thomson Home B	Bedroom 1	DBCFL13x2		relamp plug in 2 lamp cfl with LED	1	31	1095	33.945	Relamp fixture w/ (2) PL LED lamps	1	12	1095	13.14	20.805
Helen Thomson Home B	Bedroom 2	DBCFL13x2		relamp plug in 2 lamp cfl with LED	1	31	1095	33.945	Relamp fixture w/ (2) PL LED lamps	1	12	1095	13.14	20.805
Helen Thomson Home B	Bedroom 3	DBCFL13x2		relamp plug in 2 lamp cfl with LED	1	31	1095	33.945	Relamp fixture w/ (2) PL LED lamps	1	12	1095	13.14	20.805
Helen Thomson Home B	Living Room	ZCF23x2-MINI		relamp plug in 2 lamp cfl with LED	1	54	1460	78.84	Relamp fixture w/ (2) PL LED lamps	1	24	1460	35.04	43.8
Helen Thomson Home B	Bedroom 4	ZCF60Cx4		screw LED 9.5 watt A Lamp	1	240	1095	262.8	Relamp fixture w/ screw in 9.5 watt LED A lamp	1	9.5	1095	10.4025	252.3975
Helen Thomson Home B	Bedroom 4 - Restroom	CAN-13X1-PI-VER-6"		retrofit 6" can fixture with LED kit	2	15	1095	32.85	Retrofit fixture with 6" LED can kit	2	13	1095	28.47	4.38
Helen Thomson Home B	Bedroom 4 - Restroom	G60		screw LED 9.5 watt A Lamp	4	60	1095	262.8	Relamp fixture w/ screw in 9.5 watt LED A lamp	4	9.5	1095	41.61	221.19

**YOLO NON-HUD Interior/ common area lighting**

<b>YOLO NON-HUD Interior/ common area lighting</b>															
<b>SITE INFORMATION</b>				<b>FIXTURE</b>					<b>PROPOSED FIXTURE DATA</b>					<b>SAVINGS</b>	
<b>Location</b>	<b>Area type</b>	<b>Audit Code</b>	<b>ECM Code</b>	<b>Existing Description</b>	<b>Existing Qty</b>	<b>Existing Fixture Watts</b>	<b>Existing Operating Hours</b>	<b>Existing kWh/yr</b>	<b>Proposed Description</b>	<b>Proposed Qty</b>	<b>Proposed Fixture Watts</b>	<b>Proposed Operating Hours</b>	<b>Proposed kWh/yr</b>	<b>Energy Savings (kWh)</b>	
														0	
147 Main St, Woodland	100 - Lobby-Main	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	13	31	1600	644.8	Retrofit fixture w/ (2) 2' linear LED lamps	13	18	1600	374.4	270.4
147 Main St, Woodland	100 - Lobby-Main	ZCF182Px6		relamp plug in 2 lamp cfl with LED	CFL	1	144	1600	230.4	Relamp fixture w/ (2) PL LED lamps	1	24	1600	38.4	192
147 Main St, Woodland	101 - Receptionist-main	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	930.75	46.5375	82.6725
147 Main St, Woodland	102 - Receptionist-main	WSD		sensor wall mount 2 pole	No Existing Controls	1	0	1095	0	Install line voltage two pole wall mount sensor	1	0	930.75	0	0
147 Main St, Woodland	161 - Men's Restroom-main	WMB42T8		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	162 - Women's Restroom	WMB42T8		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	107 - Board Room-main	CAN-18-2-PL-HOR-6"		retrofit 6" can fixture with LED kit	Incandescent	24	45	1095	1182.6	Retrofit fixture with 6" LED can kit	24	13	1095	341.64	840.96
147 Main St, Woodland	107 - Board Room-main	CAN-18-2-PL-HOR-6"-E		retrofit 6" can fixture with LED kit	Incandescent	4	45	1095	197.1	Retrofit fixture with 6" LED can kit	4	13	1095	56.94	140.16
147 Main St, Woodland	108 - Board Room-main	WMB84T8		retrofit 32w to linear LED external driver (4 lamps)	8' 2 Lamp Fluorescent T8	8	109	1095	954.84	Retrofit fixture w/ (4) 4' linear LED lamps	8	50	1095	438	516.84
147 Main St, Woodland	109 - Board Room-main	WMB126T8		retrofit 32w to linear LED external driver (6 lamps)	12' 2 Lamp Fluorescent T8	8	166	1095	1454.16	Retrofit fixture w/ (6) 4' linear LED lamps	8	75	1095	657	797.16
147 Main St, Woodland	110 - Board Room-main	ZSCF132Px2		relamp plug in 2 lamp cfl with LED	CFL	4	31	1095	135.78	Relamp fixture w/ (2) PL LED lamps	4	24	1095	105.12	30.66
147 Main St, Woodland	111 - Board Room-main	Controller		Special Retrofit -->	Old Contorls	3	0	1095	0	New Controller Board	3	0	1095	0	0
147 Main St, Woodland	135 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	7	33	1600	369.6	Retrofit fixture w/ (2) 2' linear LED lamps	7	18	1600	201.6	168
147 Main St, Woodland	135 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	3	33	1600	158.4	Retrofit fixture w/ (2) 2' linear LED lamps	3	18	1600	86.4	72
147 Main St, Woodland	140 - Office	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	137 - Accounting	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	136 - Gillette PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	145 - Inman PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	144 - Finance PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	138 - Brock PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23

**YOLO NON-HUD Interior/ common area lighting**

<b>YOLO NON-HUD Interior/ common area lighting</b>															
<b>SITE INFORMATION</b>				<b>FIXTURE</b>					<b>PROPOSED FIXTURE DATA</b>					<b>SAVINGS</b>	
<b>Location</b>	<b>Area type</b>	<b>Audit Code</b>	<b>ECM Code</b>	<b>Existing Description</b>	<b>Existing Qty</b>	<b>Existing Fixture Watts</b>	<b>Existing Operating Hours</b>	<b>Existing kWh/yr</b>	<b>Proposed Description</b>	<b>Proposed Qty</b>	<b>Proposed Fixture Watts</b>	<b>Proposed Operating Hours</b>	<b>Proposed kWh/yr</b>	<b>Energy Savings (kWh)</b>	
147 Main St, Woodland	139 - Ruiz PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	143 - Martinez PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	142 - Copy Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	2	59	365	43.07	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	365	18.25	24.82
147 Main St, Woodland	130 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	2	33	1600	105.6	Retrofit fixture w/ (2) 2' linear LED lamps	2	18	1600	57.6	48
147 Main St, Woodland	130 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	2	33	1600	105.6	Retrofit fixture w/ (2) 2' linear LED lamps	2	18	1600	57.6	48
147 Main St, Woodland	134 - Conference Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	3	59	1095	193.815	Retrofit fixture w/ (2) 4' linear LED lamps	3	25	1095	82.125	111.69
147 Main St, Woodland	133 - Admin	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	132 - Castillo PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	131 - Baker PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	6	59	1095	387.63	Retrofit fixture w/ (2) 4' linear LED lamps	6	25	1095	164.25	223.38
147 Main St, Woodland	129 - Computer Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	128 - Copy Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	2	59	365	43.07	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	365	18.25	24.82
147 Main St, Woodland	125 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	3	33	1600	158.4	Retrofit fixture w/ (2) 2' linear LED lamps	3	18	1600	86.4	72
147 Main St, Woodland	125 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	2	33	1600	105.6	Retrofit fixture w/ (2) 2' linear LED lamps	2	18	1600	57.6	48
147 Main St, Woodland	126 - Kitchen	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	3	59	1460	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	3	25	1460	109.5	148.92
147 Main St, Woodland	126 - Kitchen	W42T8		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	5	59	1460	430.7	Retrofit fixture w/ (2) 4' linear LED lamps	5	25	1460	182.5	248.2
147 Main St, Woodland	Men's Restroom	WMB42T8		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	117 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	12	33	1600	633.6	Retrofit fixture w/ (2) 2' linear LED lamps	12	18	1600	345.6	288
147 Main St, Woodland	117 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	4	33	1600	211.2	Retrofit fixture w/ (2) 2' linear LED lamps	4	18	1600	115.2	96

**YOLO NON-HUD Interior/ common area lighting**

<b>SITE INFORMATION</b>														<b>FIXTURE</b>					<b>PROPOSED FIXTURE DATA</b>					<b>SAVINGS</b>
<b>Location</b>	<b>Area type</b>	<b>Audit Code</b>	<b>ECM Code</b>	<b>Existing Description</b>	<b>Existing Qty</b>	<b>Existing Fixture Watts</b>	<b>Existing Operating Hours</b>	<b>Existing kWh/yr</b>	<b>Proposed Description</b>	<b>Proposed Qty</b>	<b>Proposed Fixture Watts</b>	<b>Proposed Operating Hours</b>	<b>Proposed kWh/yr</b>	<b>Energy Savings (kWh)</b>										
147 Main St, Woodland	113 - PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92										
147 Main St, Woodland	111 - Dogias PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	110 - Choi PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	109 - Pena PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	108 - Ceja PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	108 - PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	107 - Copy Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	365	43.07	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	365	18.25	24.82										
147 Main St, Woodland	106 - Marquez PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	105 - Mendoza PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	104 - Jimenez PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	103 - Lopez PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	121 - Flores PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	102 - Moreno PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										
147 Main St, Woodland	139 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	1	33	1600	52.8	Retrofit fixture w/ (2) 2' linear LED lamps	1	18	1600	28.8	24										
147 Main St, Woodland	139 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	2	33	1600	105.6	Retrofit fixture w/ (2) 2' linear LED lamps	2	18	1600	57.6	48										
147 Main St, Woodland	139 - Hallway	B22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	4	33	1600	211.2	Retrofit fixture w/ (2) 2' linear LED lamps	4	18	1600	115.2	96										
147 Main St, Woodland	139 - Hallway	B22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	4	33	1600	211.2	Retrofit fixture w/ (2) 2' linear LED lamps	4	18	1600	115.2	96										
147 Main St, Woodland	162 - PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46										

**YOLO NON-HUD Interior/ common area lighting**

<b>SITE INFORMATION</b>				<b>FIXTURE</b>					<b>PROPOSED FIXTURE DATA</b>					<b>SAVINGS</b>
<b>Location</b>	<b>Area type</b>	<b>Audit Code</b>	<b>ECM Code</b>	<b>Existing Description</b>	<b>Existing Qty</b>	<b>Existing Fixture Watts</b>	<b>Existing Operating Hours</b>	<b>Existing kWh/yr</b>	<b>Proposed Description</b>	<b>Proposed Qty</b>	<b>Proposed Fixture Watts</b>	<b>Proposed Operating Hours</b>	<b>Proposed kWh/yr</b>	<b>Energy Savings (kWh)</b>
147 Main St, Woodland	158 - Ichtertz PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	151 - Maintenance Bay	WMB42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	151 - Maintenance Bay	I42T8		retrofit 32w to linear LED external driver (2 lamps)	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	151 - Maintenance Bay	I42T8-E		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	151 - Maintenance Bay	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	151 - Maintenance MRR	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	151 - Maintenance MRR	S22T8		retrofit 17w to linear LED external driver (2 lamps)	1	33	1095	36.135	Retrofit fixture w/ (2) 2' linear LED lamps	1	18	1095	19.71	16.425
147 Main St, Woodland	151 - Maintenance WRR	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	151 - Maintenance WRR	S22T8		retrofit 17w to linear LED external driver (2 lamps)	1	33	1095	36.135	Retrofit fixture w/ (2) 2' linear LED lamps	1	18	1095	19.71	16.425
147 Main St, Woodland	151 - Maintenance Electrical	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	365	21.535	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	365	9.125	12.41
147 Main St, Woodland	150 - Break Rm	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	154 - PO	B42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
<b>TOTALS</b>								<b>15087.7</b>					<b>6493.55</b>	<b>8,594.1</b>

**Yolo Non-HUD Exterior Lighting calculations**

SITE INFORMATION				FIXTURE					PROPOSED FIXTURE DATA					Energy Savings (kWh)
Location	Area type	Audit Code	ECM Code	Existing Description	Existing Qty	Existing Fixture Watts	Existing Operating Hours	Existing kWh/yr	Proposed Description	Proposed Qty	Proposed Fixture Watts	Proposed Operating Hours	Proposed kWh/yr	Energy Savings (kWh)
147 Main St, Woodland	Exterior Entrance	PJJ50HPS120-12'-BZ-PEND	screw induction 40w self ballasted	HPS	1	66	4100	270.6	Install new Corncob LED light	1	28	4100	114.8	155.8
147 Main St, Woodland	Exterior Perimeter	ESB150HPS120/277-10'-BZ-WALL-WB	new fixture LED pole shoe box small	HID	10	188	4100	7708	Install new LED shoe box pole fixture	10	53	4100	2173	5535
147 Main St, Woodland	Exterior Perimeter	ESB150HPS120/277-18'-SQ-BZ-POLE-ARM 6"	new fixture LED pole shoe box small	HID	18	188	4100	13874.4	Install new LED shoe box pole fixture small	18	53	4100	3911.4	9963
147 Main St, Woodland	Exterior Perimeter	Z-YCHA-SLS842T8	82 --> 42T8R 32w ISN	8' 2 Lamp Fluorescent T12	1	123	4100	504.3	Retrofit fixture w/ (2) 4 foot LED lamps using a breakdown fixture kit	1	25	4100	102.5	401.8
147 Main St, Woodland	Exterior Perimeter	EWPF50HPS120/277-7'-BZ-WALL	retrofit 8" can fixture with LED kit	Incandescent	7	66	4100	1894.2	Retrofit fixture with 8" LED can kit	7	32	4100	918.4	975.8
147 Main St, Woodland	EXTERIOR - EAVE OF CHIROPRACTOR	CAN-60X1-E26-VER-8"-P38	retrofit 8" can fixture with LED kit	Incandescent	3	52	4100	639.6	Retrofit fixture with 8" LED can kit	3	19	4100	233.7	405.9
														0
Helen Thomson Home A	Exterior	EDECO13CFLE26120-6'-WALL	relamp plug in 2 lamp cfl with LED	CFL	1	31	1095	33.945	Relamp fixture w/ (2) PL LED lamps	1	12	1095	13.14	20.805
Helen Thomson Home A	Exterior Garage	KCFL26x1	relamp plug in 1 lamp cfl with LED	CFL	1	26	1095	28.47	Relamp fixture w/ (1) PL LED lamps	1	12	1095	13.14	15.33
Helen Thomson Home A	Exterior - Dining	EDECO23CFLE26120-6'-WALL	relamp plug in 2 lamp cfl with LED	CFL	1	31	1095	33.945	Relamp fixture w/ (2) PL LED lamps	1	12	1095	13.14	20.805
Helen Thomson Home A	Exterior- Entry Way	DBCFL23x2	relamp plug in 2 lamp cfl with LED	CFL	1	54	4100	221.4	Relamp fixture w/ (2) PL LED lamps	1	16	4100	65.6	155.8
Helen Thomson Home B	Exterior Entry Way	CAN-23X1SB-VER-6"-P38	retrofit 6" can fixture with LED kit	Incandescent	2	23	4100	188.6	Retrofit fixture with 6" LED can kit	2	13	4100	106.6	82
Helen Thomson Home B	Exterior Patio	JJ13CFL	relamp plug in 1 lamp cfl with LED	CFL	1	17	4100	69.7	Relamp fixture w/ (1) PL LED lamps	1	12	4100	49.2	20.5
<b>TOTALS</b>								<b>25467.2</b>					<b>7714.6</b>	<b>17,752.54</b>

**YCH Main Lighting Savings Summary**

**Interior Lighting**

Site	Baseline fixtures	Existing kWh	Proposed fixtures	Proposed kWh	Energy Savings (kWh)	Energy Rate	Cost Savings
Yolo Main Office	217	13,825.9	217	6,132.4	7,693.5	\$ 0.22000	\$ 1,692.56

**Exterior Lighting**

Site	Baseline fixtures	Existing kWh	Proposed fixtures	Proposed kWh	Energy Savings (kWh)	Energy Rate	Cost Savings
Yolo Main Office	40	24891.1	40	7453.8	17,437.3	\$ 0.22000	\$ 3,836.21

**Notes:**

Commercial (A1) Non time of use rate schedule - Summer \$ 0.2473 per kWh

Commercial (A1) Non time of use rate schedule - Winter \$ 0.1927 per kWh

**Average A1 rate schedule \$ 0.22000 per kWh**

**YCH Main office is under commercial (A1) rate schedule**

**Yolo Main Office Interior lighting**

<b>Yolo Main Office Interior lighting</b>															
<b>SITE INFORMATION</b>				<b>FIXTURE</b>					<b>PROPOSED FIXTURE DATA</b>					<b>SAVINGS</b>	
<b>Location</b>	<b>Area type</b>	<b>Audit Code</b>	<b>ECM Code</b>	<b>Existing Description</b>	<b>Existing Qty</b>	<b>Existing Fixture Watts</b>	<b>Existing Operating Hours</b>	<b>Existing kWh/yr</b>	<b>Proposed Description</b>	<b>Proposed Qty</b>	<b>Proposed Fixture Watts</b>	<b>Proposed Operating Hours</b>	<b>Proposed kWh/yr</b>	<b>Energy Savings (kWh)</b>	
147 Main St, Woodland	100 - Lobby-Main	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	13	31	1600	644.8	Retrofit fixture w/ (2) 2' linear LED lamps	13	18	1600	374.4	270.4
147 Main St, Woodland	100 - Lobby-Main	ZCF182Px6		relamp plug in 2 lamp cfl with LED	CFL	1	144	1600	230.4	Relamp fixture w/ (2) PL LED lamps	1	24	1600	38.4	192
147 Main St, Woodland	101 - Receptionist-main	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	930.75	46.5375	82.6725
147 Main St, Woodland	102 - Receptionist-main	WSD		sensor wall mount 2 pole	No Existing Controls	1	0	1095	0	Install line voltage two pole wall mount sensor	1	0	930.75	0	0
147 Main St, Woodland	161 - Men's Restroom-main	WMB42T8		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	162 - Women's Restroom	WMB42T8		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	107 - Board Room-main	CAN-18-2-PL-HOR-6"		retrofit 6" can fixture with LED kit	Incandescent	24	45	1095	1182.6	Retrofit fixture with 6" LED can kit	24	13	1095	341.64	840.96
147 Main St, Woodland	107 - Board Room-main	CAN-18-2-PL-HOR-6"-E		retrofit 6" can fixture with LED kit	Incandescent	4	45	1095	197.1	Retrofit fixture with 6" LED can kit	4	13	1095	56.94	140.16
147 Main St, Woodland	108 - Board Room-main	WMB84T8		retrofit 32w to linear LED external driver (4 lamps)	8' 2 Lamp Fluorescent T8	8	109	1095	954.84	Retrofit fixture w/ (4) 4' linear LED lamps	8	50	1095	438	516.84
147 Main St, Woodland	109 - Board Room-main	WMB126T8		retrofit 32w to linear LED external driver (6 lamps)	12' 2 Lamp Fluorescent T8	8	166	1095	1454.16	Retrofit fixture w/ (6) 4' linear LED lamps	8	75	1095	657	797.16
147 Main St, Woodland	110 - Board Room-main	ZSCF132Px2		relamp plug in 2 lamp cfl with LED	CFL	4	31	1095	135.78	Relamp fixture w/ (2) PL LED lamps	4	24	1095	105.12	30.66
147 Main St, Woodland	111 - Board Room-main	Controller		Special Retrofit -->	Old Contorls	3	0	1095	0	New Controller Board	3	0	1095	0	0
147 Main St, Woodland	135 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	7	33	1600	369.6	Retrofit fixture w/ (2) 2' linear LED lamps	7	18	1600	201.6	168
147 Main St, Woodland	135 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	2' 2 Lamp Fluorescent T8	3	33	1600	158.4	Retrofit fixture w/ (2) 2' linear LED lamps	3	18	1600	86.4	72
147 Main St, Woodland	140 - Office	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	137 - Accounting	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	136 - Gillette PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	145 - Inman PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	144 - Finance PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	138 - Brock PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4' 2 Lamp Fluorescent T8	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23

**Yolo Main Office Interior lighting**

<b>SITE INFORMATION</b>				<b>FIXTURE</b>					<b>PROPOSED FIXTURE DATA</b>					<b>SAVINGS</b>
<b>Location</b>	<b>Area type</b>	<b>Audit Code</b>	<b>ECM Code</b>	<b>Existing Description</b>	<b>Existing Qty</b>	<b>Existing Fixture Watts</b>	<b>Existing Operating Hours</b>	<b>Existing kWh/yr</b>	<b>Proposed Description</b>	<b>Proposed Qty</b>	<b>Proposed Fixture Watts</b>	<b>Proposed Operating Hours</b>	<b>Proposed kWh/yr</b>	<b>Energy Savings (kWh)</b>
147 Main St, Woodland	139 - Ruiz PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	143 - Martinez PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	142 - Copy Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	365	43.07	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	365	18.25	24.82
147 Main St, Woodland	130 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	2	33	1600	105.6	Retrofit fixture w/ (2) 2' linear LED lamps	2	18	1600	57.6	48
147 Main St, Woodland	130 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	2	33	1600	105.6	Retrofit fixture w/ (2) 2' linear LED lamps	2	18	1600	57.6	48
147 Main St, Woodland	134 - Conference Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	3	59	1095	193.815	Retrofit fixture w/ (2) 4' linear LED lamps	3	25	1095	82.125	111.69
147 Main St, Woodland	133 - Admin	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	132 - Castillo PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	131 - Baker PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	6	59	1095	387.63	Retrofit fixture w/ (2) 4' linear LED lamps	6	25	1095	164.25	223.38
147 Main St, Woodland	129 - Computer Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	128 - Copy Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	365	43.07	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	365	18.25	24.82
147 Main St, Woodland	125 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	3	33	1600	158.4	Retrofit fixture w/ (2) 2' linear LED lamps	3	18	1600	86.4	72
147 Main St, Woodland	125 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	2	33	1600	105.6	Retrofit fixture w/ (2) 2' linear LED lamps	2	18	1600	57.6	48
147 Main St, Woodland	126 - Kitchen	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	3	59	1460	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	3	25	1460	109.5	148.92
147 Main St, Woodland	126 - Kitchen	W42T8		retrofit 32w to linear LED external driver (2 lamps)	5	59	1460	430.7	Retrofit fixture w/ (2) 4' linear LED lamps	5	25	1460	182.5	248.2
147 Main St, Woodland	Men's Restroom	WMB42T8		retrofit 32w to linear LED external driver (2 lamps)	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	117 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	12	33	1600	633.6	Retrofit fixture w/ (2) 2' linear LED lamps	12	18	1600	345.6	288
147 Main St, Woodland	117 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	4	33	1600	211.2	Retrofit fixture w/ (2) 2' linear LED lamps	4	18	1600	115.2	96

**Yolo Main Office Interior lighting**

SITE INFORMATION				FIXTURE					PROPOSED FIXTURE DATA					SAVINGS
Location	Area type	Audit Code	ECM Code	Existing Description	Existing Qty	Existing Fixture Watts	Existing Operating Hours	Existing kWh/yr	Proposed Description	Proposed Qty	Proposed Fixture Watts	Proposed Operating Hours	Proposed kWh/yr	Energy Savings (kWh)
147 Main St, Woodland	113 - PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	111 - Dogias PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	110 - Choi PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	109 - Pena PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	108 - Ceja PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	108 - PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	107 - Copy Rm	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	365	43.07	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	365	18.25	24.82
147 Main St, Woodland	106 - Marquez PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	105 - Mendoza PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	104 - Jimenez PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	103 - Lopez PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	121 - Flores PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	102 - Moreno PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	139 - Hallway	T22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	1	33	1600	52.8	Retrofit fixture w/ (2) 2' linear LED lamps	1	18	1600	28.8	24
147 Main St, Woodland	139 - Hallway	T22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	2	33	1600	105.6	Retrofit fixture w/ (2) 2' linear LED lamps	2	18	1600	57.6	48
147 Main St, Woodland	139 - Hallway	B22T8-DPC		retrofit 17w to linear LED external driver (2 lamps)	4	33	1600	211.2	Retrofit fixture w/ (2) 2' linear LED lamps	4	18	1600	115.2	96
147 Main St, Woodland	139 - Hallway	B22T8-DPC-E		retrofit 17w to linear LED external driver (2 lamps)	4	33	1600	211.2	Retrofit fixture w/ (2) 2' linear LED lamps	4	18	1600	115.2	96
147 Main St, Woodland	162 - PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46

**Yolo Main Office Interior lighting**

<b>SITE INFORMATION</b>				<b>FIXTURE</b>					<b>PROPOSED FIXTURE DATA</b>					<b>SAVINGS</b>
<b>Location</b>	<b>Area type</b>	<b>Audit Code</b>	<b>ECM Code</b>	<b>Existing Description</b>	<b>Existing Qty</b>	<b>Existing Fixture Watts</b>	<b>Existing Operating Hours</b>	<b>Existing kWh/yr</b>	<b>Proposed Description</b>	<b>Proposed Qty</b>	<b>Proposed Fixture Watts</b>	<b>Proposed Operating Hours</b>	<b>Proposed kWh/yr</b>	<b>Energy Savings (kWh)</b>
147 Main St, Woodland	158 - Ichtertz PO	T42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	151 - Maintenance Bay	WMB42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	151 - Maintenance Bay	I42T8		retrofit 32w to linear LED external driver (2 lamps)	4	59	1095	258.42	Retrofit fixture w/ (2) 4' linear LED lamps	4	25	1095	109.5	148.92
147 Main St, Woodland	151 - Maintenance Bay	I42T8-E		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
147 Main St, Woodland	151 - Maintenance Bay	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	151 - Maintenance MRR	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	151 - Maintenance MRR	S22T8		retrofit 17w to linear LED external driver (2 lamps)	1	33	1095	36.135	Retrofit fixture w/ (2) 2' linear LED lamps	1	18	1095	19.71	16.425
147 Main St, Woodland	151 - Maintenance WRR	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	151 - Maintenance WRR	S22T8		retrofit 17w to linear LED external driver (2 lamps)	1	33	1095	36.135	Retrofit fixture w/ (2) 2' linear LED lamps	1	18	1095	19.71	16.425
147 Main St, Woodland	151 - Maintenance Electrical	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	365	21.535	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	365	9.125	12.41
147 Main St, Woodland	150 - Break Rm	W42T8		retrofit 32w to linear LED external driver (2 lamps)	1	59	1095	64.605	Retrofit fixture w/ (2) 4' linear LED lamps	1	25	1095	27.375	37.23
147 Main St, Woodland	154 - PO	B42T8-DPC		retrofit 32w to linear LED external driver (2 lamps)	2	59	1095	129.21	Retrofit fixture w/ (2) 4' linear LED lamps	2	25	1095	54.75	74.46
<b>TOTALS</b>								<b>13825.9</b>					<b>6132.3825</b>	<b>7,693.5</b>

**Yolo YCH Main Exterior Lighting calculations**

SITE INFORMATION				FIXTURE					PROPOSED FIXTURE DATA					
Location	Area type	Audit Code	ECM Code	Existing Description	Existing Qty	Existing Fixture Watts	Existing Operating Hours	Existing kWh/yr	Proposed Description	Proposed Qty	Proposed Fixture Watts	Proposed Operating Hours	Proposed kWh/yr	Energy Savings (kWh)
147 Main St, Woodland	Exterior Entrance	PJJ50HPS120-12'-BZ-PEND		screw induction 40w self ballasted	1	66	4100	270.6	Install new Corncob LED light	1	28	4100	114.8	155.8
147 Main St, Woodland	Exterior Perimeter	ESB150HPS120/277-10'-BZ-WALL-WB		new fixture LED pole shoe box small	10	188	4100	7708	Install new LED shoe box pole fixture small	10	53	4100	2173	5535
147 Main St, Woodland	Exterior Perimeter	ESB150HPS120/277-18'-SQ-BZ-POLE-ARM 6"		new fixture LED pole shoe box small	18	188	4100	13874.4	Install new LED shoe box pole fixture small	18	53	4100	3911.4	9963
147 Main St, Woodland	Exterior Perimeter	Z-YCHA-SLS842T8		82 --> 42T8R 32w ISN	1	123	4100	504.3	Retrofit fixture w/ (2) 4 foot LED lamps using a breakdown fixture kit	1	25	4100	102.5	401.8
147 Main St, Woodland	Exterior Perimeter	EWPF50HPS120/277-7'-BZ-WALL		retrofit 8" can fixture with LED kit	7	66	4100	1894.2	Retrofit fixture with 8" LED can kit	7	32	4100	918.4	975.8
147 Main St, Woodland	EXTERIOR - EAVE OF CHIROPRACTOR	CAN-60X1-E26-VER-8"-P38		retrofit 8" can fixture with LED kit	3	52	4100	639.6	Retrofit fixture with 8" LED can kit	3	19	4100	233.7	405.9
														0
<b>TOTALS</b>								<b>24891.1</b>					<b>7453.8</b>	<b>17,437.30</b>

**Yolo Non HUD Water Savings Summary**

Building		Current Consumption		Consumption After Upgrade		Annual Savings				
Name	Number Of Fixtures Analyzed	Annual Water Kgals	Annual MMBTU's Energy Usage	Annual Water Kgals	Annual MMBTU's Energy Usage	Annual	Annual	Water/Sewage	Energy	Total
						Water Kgals	Energy MMBTU	Savings Dollars	Savings Dollars	Savings Dollars
YCH MAIN OFFICE	31	107	7	103	4	4	2	\$26.63	\$22.25	\$48.88
HELEN THOMSON HOME A	12	64	25	42	17	22	8	\$83.04	\$101.06	\$184.10
DAVIS SOLAR HOMES	46	907	96	737	72	169	0	\$900.48	\$0.00	\$900.48
HELEN THOMSON B	11	47	16	34	12	13	4	\$127.66	\$57.36	\$185.02
<b>TOTALS</b>	<b>100</b>	<b>1,124</b>	<b>144</b>	<b>916</b>	<b>106</b>	<b>209</b>	<b>15</b>	<b>\$1,137.80</b>	<b>\$180.67</b>	<b>\$1,318.48</b>

**Notes:**

YCH Main office is under small commercial (GNR1) rate schedule

Helen Thomson Homes A, B and Davis Solar homes are under residential (G1) rate schedule

Commercial (GNR1) Non time of use rate schedule - Summer \$ 0.9376

Commercial (GNR1) Non time of use rate schedule - Winter \$ 1.0556

**Average Commercial GNR1 rate schedule \$ 0.9966**

**Base Residential Gas (G1) rate schedule \$ 1.28967**

**Yolo Non-HUD Water fixture quantities**

Measure Description	Water Closet - Installation of new ultra high efficiency 0.8 GPF tank toilet	Restroom - Installation of 1.0 GPM laminar flow restrictor	Kitchen (General Purpose) Faucet - Installation of 1.5 GPM laminar flow restrictor	Showerhead - Installation of 1.5 GPM shower head
Fixture Code	T2	A3	A2	S1
Specification				
<b>Site/Bldg Name</b>				
Non-HUD - Helen Thompson Home A	2	2	2	2
Non-HUD - Helen Thompson Home B	2	3		2
Non-HUD - Davis Solar Homes	8	8	2	8
Yolo County Main Office		8		
<b>TOTALS</b>	<b>12</b>	<b>21</b>	<b>4</b>	<b>12</b>

# Water/Energy Conservation Analysis

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Facility & Upgrade Information			
<b>Facility Name: YCH MAIN OFFICE</b>			
Restroom Usage Information			
Person uses the restroom every	2.5	hours	
Time faucet on time per restroom use is	12.0	seconds	

Utility Information				CCFs
Water Cost	per kgal	\$6.10		\$ 4.56
Sewage Cost	per kgal	\$4.30		\$ 3.22
Variable rate	per kgal	\$6.10		
Hot Water Sourc	135°F	Avg Cold W:	67°F	
Existing Water Heaters	100%	Gas		
Gas Cost	per CCF	\$0.9966		
Existing Efficiency Factor		62%		
New Water Heaters		Gas		per therm
Gas Cost		\$0.9966		
New Efficiency Factor		62.0%		
Metered Water Usage (Kgals/year)		107		143

Occupancy Analysis			Hours on Site per day	Hours on Site Annual Total	Restroom Uses per year
	QTY	Days on Site			
Staff	30	260	14	109,200	43,680
Total					<b>43,680</b>

Equipment Information		Retrofit	Usage Information				Current Equipment Consumption			Upgraded Equipment Consumption			Annual Savings				
Type	QTY	Retrofit Code	Faucet Uses per year per faucet	Water On Minutes/Use	Average Water Temp °F	% of Hot Water Used	Water Usage Rate Gal/min	Annual Water Kgals	Annual MMBTU's Energy Use	Water Usage Rate Gal/min	Annual Water Kgals	Annual MMBTU's Energy Use	Annual Water Kgals	Annual Energy MMBTU	Water/Sewage Savings Dollars	Energy Savings Dollars	Total Savings Dollars
<b>Restroom Sinks</b>																	
Std 4 & 8 inch Hot and Cold	8	A3	5460.0	0.2	105	55.9%	1.50	13.10	6.70	1.00	8.74	4.47	4.37	2.23	\$27	\$22	\$49
<b>Toilets</b>																	
1.6 GPF	13	NOSAV	2688.0	80%			1.60	55.91	0.00	1.60	55.91	0.00	0.00	0.00	\$0	\$0	\$0
<b>Urinals</b>																	
0.5 gpf	2	DONOT	4368.0	20%			0.50	4.37	0.00	0.50	4.37	0.00	0.00	0.00	\$0	\$0	\$0
<b>Showers</b>																	
Standard Showers - high flow	4	DONOT	0.0	260	105	55.9%	2.50	0.00	0.00	2.50	0.00	0.00	0.00	0.00	\$0	\$0	\$0
<b>Other</b>																	
Efficient or non-adaptable Faucets	2	NOSAV	10.0	260	67	0.0%	1.50	7.80	0.00	1.50	7.80	0.00	0.00	0.00	\$0	\$0	\$0
Hot Water Heater- Gas 30 Gallon	2	HWH-G30													\$0.00	\$0.00	\$0.00
<b>Miscellaneous Uses</b>																	
Misc Undefined Use								25.78			25.78						
<b>Building Total Analyzed</b>	<b>31</b>							<b>106.96</b>	<b>6.70</b>		<b>102.60</b>	<b>4.47</b>	<b>4.37</b>	<b>2.23</b>	<b>\$27</b>	<b>\$22</b>	<b>\$49</b>

## Water/Energy Conservation Analysis

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Facility & Upgrade Information		
<b>Facility Name: HELEN THOMSON HOME A</b>		
<b>Restroom Usage Information</b>		
Person uses the restroom every	2.5	hours
Average faucet on time per restroom use is	12.0	seconds

Utility Information				CCFs
Water Cost	per kgal	\$3.80		2.84
Sewage Cost	per kgal	\$9.77		7.31
Variable cost	per kgal	\$3.80		
Hot Water Sou	135°F	Avg Cold W	67°F	
Existing Water Heaters	100%	Gas		
Gas Cost	per CCF	\$1.2897		
Existing Efficiency Factor		62%		
New Water Heaters		Gas		
Gas Cost		\$1.2897	per therm	
New Efficiency Factor		62.0%		
Metered Water Usage (Kgals/year)		63		84

Occupancy Analysis			Hours on Site	Hours on Site	Restroom
	QTY	Days on Site	Site per day	Annual Total	Uses per year
<b>Residents</b>	4	365	14	20,440	8,176
<b>Total</b>					<b>8,176</b>

Equipment Information		Retrofit	Usage Information				Current Equipment Consumption			Upgraded Equipment Consumption			Annual Savings				
Type	QTY	Retrofit Code	Average Water Temp °F	% of Hot Water Used	Water Usage Rate	Annual Water Kgals	Annual MMBTU's Energy Use	Water Usage Rate	Annual Water Kgals	Annual MMBTU's Energy Use	Annual Water Kgals	Annual Energy MMBTU	Water/Sewage Savings Dollars	Energy Savings Dollars	Total Savings Dollars		
			<b>Faucet Uses per year per faucet</b>	<b>Water On Minutes/Use</b>	<b>AVG. Water Temp</b>			<b>Gal/min</b>			<b>Gal/min</b>						
<b>Restroom Sinks</b>																	
Std 4 & 8 inch Hot and Cold	2	A3	4088.0	0.2	105	55.9%		1.00	1.64	0.84	0.00	0.00	\$0	\$0	\$0		
			<b>Flushes per year Per Toilet</b>	<b>% of Total Flushes</b>				<b>Gal/flush</b>			<b>Gal/flush</b>						
1.6 GPF Tank Toilet	2	T2	4088.0	100%				1.60	13.08	0.00	6.54	0.00	\$25	\$0	\$25		
			<b>Min/day</b>	<b>Days/Year</b>	<b>AVG Water Temp</b>			<b>Gal/min</b>			<b>Gal/min</b>						
<b>Showers</b>																	
Standard Showers - high flow	2	S1	10.0	365	105	55.9%		2.50	18.25	9.33	7.30	3.73	\$28	\$48	\$76		
			<b>Min/day</b>	<b>Days/Year</b>	<b>Water Temp</b>			<b>Gal/min</b>			<b>Gal/min</b>						
General Purpose Sinks	2	A2	10.0	365	105	55.9%		2.60	18.98	9.70	8.03	4.10	\$30	\$53	\$83		
Dish Washer (batch)	1	DONOT	60.0	365	135	100.0%		0.08	1.83	1.67	0.00	0.00	\$0	\$0	\$0		
Irrigation	1	DONOT							4.49		0.00		\$0	\$0	\$0		
Laundry System Size 1	1	DONOT	60.0	365	135	75.0%		0.25	5.48	3.76	0.00	0.00	\$0	\$0	\$0		
Hot Water Heater- Gas 40 Gal	1	HWH-G40											\$0.00	\$0.00	\$0.00		
<b>Miscellaneous Uses</b>																	
Misc Undefined Use																	
<b>Building Total Analyzed</b>		<b>12</b>						<b>63.73</b>	<b>25.29</b>		<b>41.86</b>	<b>17.46</b>	<b>21.87</b>	<b>7.84</b>	<b>\$83</b>	<b>\$101</b>	<b>\$184</b>

## Water/Energy Conservation Analysis

2/22/17 1:28 PM

Facility & Upgrade Information		
<b>Facility Name: DAVIS SOLAR HOMES</b>		
Restroom Usage Information		
Person uses the restroom every	2.5	hours
Average faucet on time per restroom use is	12.0	seconds

Utility Information				CCFs
Water Cost	per kgal	\$4.41		3.30
Sewage Cost	per kgal	\$0.91		0.68
Variable cost	per kgal	\$5.32		
Hot Water Source Temp	135°F	Avg Cold Water Temp	67°F	
Existing Water Heaters	100%	Gas		
Gas Cost	per CCF	\$0.0000		
Existing Efficiency Factor		62%		
New Water Heaters		Gas		
Gas Cost		\$0.0000	per therm	
New Efficiency Factor		62.0%		
Metered Water Usage (Kgals/year)		907		1212

Occupancy Analysis			Hours on Site per day	Hours on Site Annual Total	Restroom Uses per year
	QTY	Days on Site			
<b>Residents</b>	30	365	14	153,300	61,320
Total					<b>61,320</b>

Equipment Information		Retrofit	Usage Information				Current Equipment Consumption			Upgraded Equipment Consumption			Annual Savings				
Type	QTY	Retrofit Code	Faucet Uses per year per faucet	Water On Minutes/Use	Average Water Temp °F	% of Hot Water Used	Water Usage Rate Gal/min	Annual Water Kgals	Annual MMBTU's Energy Use	Water Usage Rate Gal/min	Annual Water Kgals	Annual MMBTU's Energy Use	Annual Water Kgals	Annual Energy MMBTU	Water/Sewage Savings Dollars	Energy Savings Dollars	Total Savings Dollars
<b>Restroom Sinks</b>																	
Std 4 & 8 inch Hot and Cold	8	A3	7665.0	0.2	105	55.9%	1.98	24.22	12.38	1.00	12.26	6.27	11.96	6.11	\$64	\$0	\$64
<b>Toilets</b>																	
			<b>Flushes per year</b>	<b>% of Total</b>													
			<b>Per Toilet</b>	<b>Flushes</b>													
3.5 GPF Tank Toilet	5	T2	7665.0	100%			3.50	134.14	0.00	0.80	30.66	0.00	103.48	0.00	\$551	\$0	\$551
1.6 GPF Tank Toilet	3	T2	7665.0	100%			1.60	36.79	0.00	0.80	18.40	0.00	18.40	0.00	\$98	\$0	\$98
<b>Showers</b>																	
			<b>Min/day</b>	<b>Days/Year</b>	<b>AVG Water Temp</b>												
Standard Showers - high flow	8	S1	10.0	365	105	55.9%	2.50	73.00	37.31	1.50	43.80	22.39	29.20	14.93	\$155	\$0	\$155
<b>Other</b>																	
			<b>Min/day</b>	<b>Days/Year</b>	<b>Water Temp</b>												
General Purpose Sinks	2	A2	10.0	365	105	55.9%	2.35	17.16	8.77	1.50	10.95	5.60	6.21	3.17	\$33	\$0	\$33
Efficient or non-adaptable Faucets	5	NOSAV	10.0	365	67	0.0%	1.50	27.38	0.00	1.50	27.38	0.00	0.00	0.00	\$0	\$0	\$0
Dish Washer (batch)	7	DONOT	60.0	365	135	100.0%	0.08	12.78	11.69	0.08	12.78	11.69	0.00	0.00	\$0	\$0	\$0
Irrigation	1	DONOT						155.58			155.58		0.00	0.00	\$0	\$0	\$0
Laundry System Size 1	7	DONOT	60.0	365	135	75.0%	0.25	38.33	26.29	0.25	38.33	26.29	0.00	0.00	\$0	\$0	\$0
<b>Miscellaneous Uses</b>																	
Misc Undefined Use								387.21			387.21						
<b>Building Total Analyzed</b>		<b>46</b>						<b>906.58</b>	<b>96.44</b>		<b>737.34</b>	<b>72.23</b>	<b>169.24</b>	<b>24.21</b>	<b>\$900.48</b>	<b>\$0</b>	<b>\$900</b>

## Water/Energy Conservation Analysis

2/22/17 1:28 PM

Facility & Upgrade Information		
Facility Name: HELEN THOMSON B		
Restroom Usage Information		
Person uses the restroom every	3.5	hours
Faucet on time per restroom use is	12.0	seconds

Utility Information				CCFs
Water Cost	per kgal	\$9.55		\$ 7.14
Sewage Cost	per kgal	\$10.86		\$ 8.11
Water only rate	per kgal	\$9.55		
Hot Water Source Temp	135°F	Avg Cold Water Temp	67°F	
Existing Water Heaters	100%	Gas		
Gas Cost	per CCF	\$1.2897		
Existing Efficiency Factor		62%		
New Water Heaters		Gas		
Gas Cost		\$1.2897	per therm	
New Efficiency Factor		62.0%		
Metered Water Usage (Kgals/year)		47		63

Occupancy Analysis			Hours on Site per day	Hours on Site Annual Total	Restroom Uses per year
	QTY	Days on Site			
Residents	4	365	14	20,440	5,840
Total					5,840

Equipment Information		Retrofit	Usage Information				Current Equipment Consumption			Upgraded Equipment Consumption			Annual Savings				
Type	QTY	Retrofit Code			Average Water Temp °F	% of Hot Water Used	Water Usage Rate	Annual Water Kgals	Annual MMBTU's Energy Use	Water Usage Rate	Annual Water Kgals	Annual MMBTU's Energy Use	Annual Water Kgals	Annual Energy MMBTU	Water/Sewage Savings Dollars	Energy Savings Dollars	Total Savings Dollars
			<b>Faucet Uses per year per faucet</b>	<b>Water On Minutes/Use</b>	<b>AVG. Water Temp</b>		<b>Gal/min</b>			<b>Gal/min</b>							
Restroom Sinks			1946.7	0.2	105	55.9%	2.20	2.57	1.31	1.00	1.17	0.60	1.40	0.72	\$13	\$9	\$23
			<b>Flushes per year Per Toilet</b>	<b>% of Total Flushes</b>			<b>Gal/flush</b>			<b>Gal/flush</b>							
Toilets			2920.0	100%			1.60	9.34	0.00	0.80	4.67	0.00	4.67	0.00	\$45	\$0	\$45
			<b>Min/day</b>	<b>Days/Year</b>	<b>AVG Water Temp</b>		<b>Gal/min</b>			<b>Gal/min</b>							
Shows			10.0	365	105	55.9%	2.50	18.25	9.33	1.50	10.95	5.60	7.30	3.73	\$70	\$48	\$118
			<b>Min/day</b>	<b>Days/Year</b>	<b>Water Temp</b>		<b>Gal/min</b>			<b>Gal/min</b>							
Efficient or non-ada	1	NOSAV	10.0	365	67	0.0%	1.50	5.48	0.00	1.50	5.48	0.00	0.00	0.00	\$0	\$0	\$0
Dish Washer (batch	1	DONOT	60.0	365	135	100.0%	0.08	1.83	1.67	0.08	1.83	1.67	0.00	0.00	\$0	\$0	\$0
Laundry System Siz	1	DONOT	60.0	365	135	75.0%	0.25	5.48	3.76	0.25	5.48	3.76	0.00	0.00	\$0	\$0	\$0
Hot Water Heater- C	1	HWH-G40													\$0.00	\$0.00	\$0.00
<b>Miscellaneous Uses</b>																	
Misc Undefined Use								4.19			4.19						
<b>Building Total Analyz</b>			11				47.12	16.07		33.75	11.62		13.37	4.45	\$128	\$57	\$185

YCH Main Water Conservation Scope of Work

Measure Description	Restroom - Installation of 1.0 GPM laminar flow restrictor
Fixture Code	A3
Specification	
Yolo County Main Office	8
<b>TOTALS</b>	<b>8</b>

# Water/Energy Conservation Analysis

2/22/17 1:28 PM

Facility & Upgrade Information			
<b>Facility Name: YCH MAIN OFFICE</b>			
Restroom Usage Information			
Person uses the restroom every	2.5	hours	
Time faucet on time per restroom use is	12.0	seconds	

Utility Information				CCFs
Water Cost	per kgal	\$6.10	\$	4.56
Sewage Cost	per kgal	\$4.30	\$	3.22
Variable rate	per kgal	\$6.10		
Hot Water Sourc	135°F	Avg Cold W:	67°F	
Existing Water Heaters	100%	Gas		
Gas Cost	per CCF	\$0.9966		
Existing Efficiency Factor		62%		
New Water Heaters		Gas		per therm
Gas Cost		\$1.2100		
New Efficiency Factor		62.0%		
Metered Water Usage (Kgals/year)		107		143

Occupancy Analysis			Hours on Site per day	Hours on Site Annual Total	Restroom Uses per year
Staff	QTY	Days on Site			
	30	260	14	109,200	43,680
<b>Total</b>					<b>43,680</b>

Equipment Information		Retrofit	Usage Information				Current Equipment Consumption			Upgraded Equipment Consumption			Annual Savings				
Type	QTY	Retrofit Code	Faucet Uses per year per faucet	Water On Minutes/Use	Average Water Temp °F	% of Hot Water Used	Water Usage Rate Gal/min	Annual Water Kgals	Annual MMBTU's Energy Use	Water Usage Rate Gal/min	Annual Water Kgals	Annual MMBTU's Energy Use	Annual Water Kgals	Annual Energy MMBTU	Water/Sewage Savings Dollars	Energy Savings Dollars	Total Savings Dollars
<b>Restroom Sinks</b>																	
Std 4 & 8 inch Hot and Cold	8	A3	5460.0	0.2	105	55.9%	1.50	13.10	6.70	1.00	8.74	4.47	4.37	2.23	\$27	\$22	\$49
<b>Toilets</b>																	
1.6 GPF	13	NOSAV	2688.0	80%			1.60	55.91	0.00	1.60	55.91	0.00	0.00	0.00	\$0	\$0	\$0
<b>Urinals</b>																	
0.5 gpf	2	DONOT	4368.0	20%			0.50	4.37	0.00	0.50	4.37	0.00	0.00	0.00	\$0	\$0	\$0
<b>Showers</b>																	
Standard Showers - high flow	4	DONOT	0.0	260	105	55.9%	2.50	0.00	0.00	2.50	0.00	0.00	0.00	0.00	\$0	\$0	\$0
<b>Other</b>																	
Efficient or non-adaptable Faucets	2	NOSAV	10.0	260	67	0.0%	1.50	7.80	0.00	1.50	7.80	0.00	0.00	0.00	\$0	\$0	\$0
Hot Water Heater- Gas 30 Gallon	2	HWH-G30													\$0.00	\$0.00	\$0.00
<b>Miscellaneous Uses</b>																	
Misc Undefined Use								25.78			25.78						
<b>Building Total Analyzed</b>	<b>31</b>							<b>106.96</b>	<b>6.70</b>		<b>102.60</b>	<b>4.47</b>	<b>4.37</b>	<b>2.23</b>	<b>\$26.63</b>	<b>\$22.25</b>	<b>\$48.88</b>

**SIEMENS INDUSTRY, INC., BUILDING TECHNOLOGIES DIVISION**

*PAYMENT SCHEDULES - EXHIBIT B*

**Article 1: Payment for Scope of Work**

- 1.1 **Price:** As full consideration of the Work as described in Exhibit A, Article 1: Scope of Work, the CLIENT shall pay to SIEMENS \$374,563 (plus taxes, if applicable).
- 1.2 **Escrow:** The CLIENT has agreed to deposit the Price into an Escrow Account at a financial institution satisfactory to both the CLIENT and SIEMENS. All expenses to establish the Escrow Account shall be the complete responsibility of the CLIENT and the CLIENT will receive all interest earnings from the Escrow Account. SIEMENS will submit periodic invoices to the CLIENT based on the Payment Schedule in Table B.1 below. The CLIENT shall be responsible for submitting the necessary documents to the Escrow Agent to allow for timely disbursements from the Escrow Account. The funding of the Escrow Account in an amount equal to or greater than the Price stated in Article 1.1 above shall be a condition precedent to SIEMENS obligation to perform or to continue the performance of the Work. If the Escrow Account is not funded within 15 days of the execution of this Agreement, this Agreement shall be null and void. This 15 day funding period may be extended as mutually agreed in writing by the Parties. In the event that the Agreement becomes null and void as described in this paragraph and CLIENT has previously authorized SIEMENS to proceed with the Work, the CLIENT shall be obligated to reimburse SIEMENS either: (i) for the Work performed to date; or (ii) for the Work specifically authorized by the CLIENT.
- 1.3 **Timely Payments:** The CLIENT agrees to pay SIEMENS per Table B.1 below. CLIENT agrees to pay all invoices submitted by SIEMENS per Article 4 of the Agreement.

**Table B.1 – FIM Work Payment Schedule**

Project Phase	Payments (\$)	Payments (%)	Schedule
Mobilization	\$112,369	30.0%	30 Days after Contract Signature
Substantial Completion	\$243,466	65.0%	Monthly Progress Billing
Final Completion	\$18,728	5%	
<b>PROJECT TOTAL:</b>	<b>\$374,563</b>	<b>100.0%</b>	

Article 1 of Exhibit B is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

**CLIENT: Yolo County Housing**

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

**SIEMENS: Siemens Industry, Inc.**

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_



## **TERMS AND CONDITIONS**

### **Article 1: General**

1.1 (a) The Agreement, including all Exhibits and Appendices thereto, constitutes the entire, complete and exclusive agreement between the parties relating to the services ("Services") and the equipment, materials, parts, supplies and software (collectively "Product") to be provided by SIEMENS as described in Exhibit A (such Services and Product collectively referred to as "Work") and shall supersede and cancel all prior agreements and understandings, written or oral, relating to the subject matter of the Agreement. Neither party may assign the Agreement or any rights or obligations hereunder without the prior written consent of the other, except that either party may assign this Agreement to its affiliates and SIEMENS may grant a security interest in the Agreement; assign proceeds of the Agreement; and/or use subcontractors in performance of the Work.

(b) The terms and conditions of this Agreement shall not be modified or rescinded except in writing, signed by a corporate officer of SIEMENS and representative of Client. SIEMENS' and Client's performance under this Agreement is expressly conditioned on the terms of this Agreement, notwithstanding any different or additional terms contained in any writing at any time submitted or to be submitted to SIEMENS by Client relating to the Work.

(c) The terms and conditions set forth herein shall supersede, govern and control any conflicting terms of the Proposed Solution or the Proposal.

(d) Nothing contained in this Agreement shall be construed to give any rights or benefits to anyone other than the Client and SIEMENS without the express written consent of both parties. All provisions of this Agreement allocating responsibility or liability between the parties shall survive the completion of the Work and termination of this Agreement.

1.2 This Agreement shall be governed by and enforced in accordance with the laws of the State of California. Any litigation arising under this Agreement shall be brought in the State or Commonwealth in which the Work is being provided to Client. THE PARTIES KNOWINGLY AND INTELLIGENTLY WAIVE ANY RIGHT TO A JURY TRIAL ON MATTERS ARISING OUT OF THIS AGREEMENT.

### **Article 2: Work by SIEMENS**

2.1 SIEMENS will perform the Work expressly described in Exhibit A (including any change orders thereto mutually agreed upon in writing) issued under this Agreement and signed by both parties. The Work shall be performed in a manner consistent with the degree of care and skill ordinarily exercised by reputable companies performing the same or similar Work in the same locale acting under similar circumstances and conditions.

2.2 SIEMENS shall perform the Work during its local, normal working hours, unless otherwise agreed in writing.

2.3 SIEMENS is not required to conduct safety or other tests, install or maintain any devices or equipment or make modifications or upgrades to any Product beyond the scope set forth in Exhibit A. Any Client request to change the scope or the nature of the Work must be in the form of a mutually agreed change order, effective only when executed by all parties hereto.

2.4 All reports and drawings specifically prepared for and deliverable to Client pursuant to Exhibit A ("Deliverables") shall become Client's property upon full payment to SIEMENS. SIEMENS may retain file copies of such Deliverables. All other reports, notes, calculations, data, drawings, estimates, specifications, manuals, other documents and all computer programs, codes and computerized materials prepared by or for SIEMENS are instruments of SIEMENS' work ("Instruments") and shall remain SIEMENS' property. Siemens conveys no license to software unless otherwise expressly provided in this Agreement. To the extent specified in this Agreement, Client, its employees and agents ("Permitted Users") shall have a right to make and retain copies of Instruments except uncompiled code, and to use all Instruments, provided however, the Instruments shall not be used or relied upon by any parties other than Permitted Users, and such use shall be subject to this Agreement and limited to the particular project and location for which the Instruments were provided. All Deliverables and Instruments provided to Client are for Permitted Users' use only for the purposes disclosed to SIEMENS, and Client shall not transfer them to others or use them or permit them to be used for any extension of the Work or any other project or purpose, without SIEMENS' express written consent. Any reuse of Deliverables or Instruments for other projects or locations without the written consent of SIEMENS, or use by any party other than Permitted Users, will be at Permitted Users' sole risk and without liability to SIEMENS; and, in addition to any other rights SIEMENS may have, Client shall indemnify, defend and hold SIEMENS harmless from any claims, losses or damages arising therefrom.

2.5 Client acknowledges that SIEMENS, in the normal conduct of its business, may use concepts and improved skills and know-how developed while performing other contracts. Client acknowledges the benefit which may accrue to it through this practice, and accordingly agrees that anything in this Agreement notwithstanding Siemens may continue, without payment of a royalty, this practice of using concepts and improved skills and know-how developed while performing this Agreement.

2.6 SIEMENS shall be responsible for any portion of the Work performed by any subcontractor of SIEMENS. SIEMENS shall not have any responsibility, duty or authority to direct, supervise or oversee any employees or contractors of Client or their work or to provide the means, methods or sequence of their

work or to stop their work. SIEMENS' work and/or presence at a site shall not relieve others of their responsibility to Client or to others. SIEMENS shall not be liable for the failure of Client's employees, contractors or others to fulfill their responsibilities.

### **Article 3: Responsibilities of Client**

3.1 Client, without cost to SIEMENS, shall:

(a) Designate a contact person with authority to make decisions for Client regarding the Work and provide SIEMENS with information sufficient to contact such person in an emergency;

(b) Provide or arrange for reasonable access and make all provisions for SIEMENS to enter any site where Work is to be performed;

(c) Permit SIEMENS to control and/or operate all controls, systems, apparatus, equipment and machinery necessary to perform the Work;

(d) Furnish SIEMENS with all available information pertinent to the Work;

(e) Furnish SIEMENS with all approvals, permits and consents from government authorities and others as may be required for performance of the Work except for those SIEMENS has expressly agreed in writing to obtain;

(f) Maintain the Work site in a safe condition; notify SIEMENS promptly of any site conditions requiring special care; and provide SIEMENS with any available documents describing the quantity, nature, location and extent of such conditions;

(g) Comply with all laws and provide any notices required to be given to any government authorities in connection with the Work, except such notices SIEMENS has expressly agreed in writing to give;

(h) Provide SIEMENS with Material Safety Data Sheets (MSDS) conforming to OSHA requirements related to all Hazardous Materials located at the site which may impact the Work;

(i) Furnish to SIEMENS any contingency plans related to the site; and

(j) Furnish the specified operating environment, including without limitation, suitable, clean, stable, properly conditioned electrical power for the Work; telephone lines, capacity and connectivity as required by the Work; and heat, light, air conditioning and other utilities for the Work.

3.2 Client acknowledges that the technical and pricing information contained in this Agreement is confidential and proprietary to SIEMENS and agrees not to disclose it or otherwise make it available to others without SIEMENS' express written consent.

3.3 Client acknowledges that it is now and shall at all times remain in control of the Work site. Except as expressly provided herein, SIEMENS shall not be responsible for the adequacy of the health, safety or security programs or precautions related to Client's activities or operations, Client's other contractors, the work of any other person or entity, or Client's site conditions. SIEMENS is not responsible for inspecting, observing, reporting or correcting health or safety conditions or deficiencies of Client or others at Client's site. So as not to discourage SIEMENS from voluntarily addressing health or safety issues at Client's site, in the event SIEMENS does address such issues by making observations, reports, suggestions or otherwise, SIEMENS shall not be liable or responsible on account thereof.

3.4 Except as expressly stated in Exhibit A, Client is solely responsible for any removal, replacement or refinishing of the building structure or finishes that may be required to perform or gain access to the Work.

### **Article 4: Compensation**

4.1 SIEMENS shall be compensated for the Work as expressly stated in Exhibit B, or, if not expressly stated, then at its prevailing rates and shall be reimbursed for costs and expenses (plus reasonable profit and overhead) incurred in performance of the Work.

4.2 SIEMENS shall invoice Client as provided in this Agreement (including any modifications), or if not expressly provided, then on a monthly or other progress billing basis. Invoices are due and payable within 25 calendar days of receipt by Client or as otherwise set forth in this Agreement. If any payment is not received when due and remains unpaid for thirty (30) days after written notice thereof, SIEMENS may deem Client to be in breach of this Agreement and may enforce any remedies available to it hereunder or at law, including without limitation, suspension or termination of the Work, and SIEMENS shall be entitled to compensation for the Work previously performed and for costs reasonably incurred in connection with the suspension or termination. Any amount not paid within ten (10) days of the date due shall accrue interest from the date due, until paid, at the rate of twelve percent (12%) per annum. Client shall reimburse SIEMENS for SIEMENS' costs and expenses (including reasonable attorneys' and witnesses' fees) incurred for collection under this Agreement. In the event Client disputes any portion or all of an invoice, it shall notify SIEMENS in writing of the amount in dispute and the reason for its disagreement within 21 days of receipt of the invoice. The undisputed portion shall be paid when due, and interest on any unpaid portion shall accrue as aforesaid, from the date due until the date of payment, to the extent that such amounts are finally determined to be payable to SIEMENS.

4.3 Except to the extent expressly agreed in this Agreement, SIEMENS' fees do not include any taxes, excises, fees, duties or other government charges related to the Work, and Client shall pay such amounts or reimburse SIEMENS for any amounts it pays. If Client claims a tax exemption or direct payment permit, it shall provide SIEMENS with a valid exemption certificate or permit and indemnify, defend and hold SIEMENS harmless from any taxes, costs and

penalties arising out of same.

#### **Article 5. Changes; Delays; Excused Performance**

**5.1** As the Work is performed, conditions may change or circumstances outside SIEMENS' reasonable control (including changes of law) or not reasonably foreseeable to SIEMENS (including unforeseen site conditions) may develop or be discovered. If such circumstances require SIEMENS to expend additional costs, effort or time to complete the Work, SIEMENS will notify Client and an equitable adjustment will be made to the compensation and time for performance. In the event conditions or circumstances require Work to be suspended or terminated, SIEMENS shall be compensated for Work performed and for costs reasonable incurred in connection with the suspension or termination.

**5.2** SIEMENS shall not be responsible for loss, delay, injury, damage or failure of performance that may be caused by circumstances beyond its control, including but not limited to acts or omissions by Client or its employees, agents or contractors, Acts of God, war, civil commotion, acts or omissions of government authorities, fire, theft, corrosion, flood, water damage, lightning, freeze-ups, strikes, lockouts, differences with workmen, riots, explosions, quarantine restrictions, delays in transportation, or shortage of vehicles, fuel, labor or materials. In the event of any such circumstances, SIEMENS shall be excused from performance of the Work and the time for performance shall be extended by a period equal to the time lost plus a reasonable recovery period and the compensation shall be equitably adjusted to compensate for additional costs SIEMENS incurs due to such circumstances.

#### **Article 6: Warranty, Allocation of Risk**

**6.1** (a) All Product manufactured by SIEMENS or bearing its nameplate is warranted to be free from defects in material and workmanship arising from normal use and service for one year from the earlier of the date installed by SIEMENS or date of first beneficial use.

(b) Labor for all Services under this Agreement is warranted to be free from defects for one year after the earlier of the date the Services are substantially completed or date of first beneficial use.

**6.2** (a) The limited warranties set forth above shall be void as to, and shall not apply to, any Work (i) repaired, altered or improperly installed by any person other than SIEMENS or its authorized representative; (ii) subjected to unreasonable or improper use or storage, used beyond rated conditions, operated other than per SIEMENS' or the manufacturer's instructions, or otherwise subjected to improper maintenance, negligence or accident; (iii) damaged because of any use of the Work after Client has, or should have had, knowledge of any defect in the Work; or (iv) Product not manufactured, fabricated and assembled by SIEMENS or not bearing SIEMENS' nameplate. SIEMENS assigns to Client, without recourse, any and all assignable warranties available from any manufacturer, supplier, or subcontractor of such Product and will assist Client in enforcement of such assigned warranties.

(b) Any claim under the limited warranty granted above must be made in writing to SIEMENS within thirty (30) days after discovery of the claimed defect. Such limited warranty only extends to Client and not to any subsequent owner of the Work. Client's sole and exclusive remedy for any Work not conforming with this limited warranty is limited to, at SIEMENS' option, (i) repair or replacement of defective components of covered Product, or (ii) reperformance of the defective portion of the Services, or (iii) to the extent previously paid, the issuance of a credit or refund for the original purchase price of such defective component or portion of the Work.

(c) SIEMENS shall not be required to repair or replace more than the component(s) of the Work actually found to be defective. SIEMENS' warranty liability shall not exceed the purchase price of such item. Repaired or replaced Work will be warranted hereunder only for the remaining portion of the original warranty period.

**6.3** THE EXPRESS LIMITED WARRANTIES PROVIDED ABOVE ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES, STATUTORY, EXPRESS, OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED. SIEMENS MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT ANYWORK PROVIDED HEREUNDER WILL PREVENT ANY LOSS, OR WILL IN ALL CASES PROVIDE THE PROTECTION FOR WHICH IT IS INSTALLED OR INTENDED. THE LIMITED EXPRESS WARRANTIES AND REPRESENTATIONS SET FORTH IN THIS AGREEMENT MAY ONLY BE MODIFIED OR SUPPLEMENTED IN A WRITING SIGNED BY A DULY AUTHORIZED CORPORATE OFFICER OF SIEMENS.

**6.4** Risk of loss of Product furnished by SIEMENS shall pass to Client upon delivery to Client's premises, and Client shall be responsible for protecting and insuring them against theft and damage. However, until SIEMENS is paid in full, SIEMENS shall retain title for security purposes only and the right to repossess the Product.

**6.5** Client hereby, for it and any parties claiming under it, releases and discharges SIEMENS from any liability arising out of all hazards covered by Client's insurance, and all claims against SIEMENS arising out of such hazards, including any right of subrogation by Client's insurance carrier, are hereby waived by Client.

**6.6** ANYTHING HEREIN NOTWITHSTANDING, IN NO EVENT SHALL EITHER PARTY BE RESPONSIBLE UNDER THIS AGREEMENT FOR

INCIDENTAL, CONSEQUENTIAL, PUNITIVE, EXEMPLARY OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS, LOSS OF USE AND/OR LOST BUSINESS OPPORTUNITIES, WHETHER ARISING IN WARRANTY, LATE OR NON-DELIVERY OF ANY WORK, TORT, CONTRACT OR STRICT LIABILITY, AND REGARDLESS OF WHETHER EITHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND, IN ANY EVENT, SIEMENS' AGGREGATE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES OR EXPENSES (INCLUDING ATTORNEYS FEES) ARISING OUT OF THIS AGREEMENT, OR OUT OF ANY WORK FURNISHED UNDER THIS AGREEMENT, WHETHER BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, AGENCY, WARRANTY, TRESPASS, INDEMNITY OR ANY OTHER THEORY OF LIABILITY, SHALL BE LIMITED TO THE LESSER OF \$1,000,000 OR THE TOTAL COMPENSATION RECEIVED BY SIEMENS FROM CLIENT UNDER THIS AGREEMENT. SIEMENS reserves the right to control the defense and settlement of any claim for which SIEMENS has an obligation to indemnify hereunder. The parties acknowledge that the price which SIEMENS has agreed to perform its Work and obligations under this Agreement is calculated based upon the foregoing limitations of liability, and that SIEMENS has expressly relied on, and would not have entered into this Agreement but for such limitations of liability.

**6.7** It is understood and agreed by and between the parties that SIEMENS is not an insurer and this Agreement is not intended to be an insurance policy or a substitute for an insurance policy. Insurance, if any, shall be obtained by Client. Fees are based solely upon the value of the Work, and are unrelated to the value of Client's property or the property of others on Client's premises.

#### **Article 7: Hazardous Materials Provisions**

**7.1** The Work does not include directly or indirectly performing or arranging for the detection, monitoring, handling, storage, removal, transportation, disposal or treatment of Oil or Hazardous Materials. Except as disclosed pursuant to this Article, Client represents that, to its best knowledge, there is no asbestos or any other hazardous or toxic materials, as defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, the regulations promulgated thereunder, and other applicable federal, state or local law ("*Hazardous Materials*"), present at Client's Sites where the Work is performed. SIEMENS will notify Client immediately if it discovers or suspects the presence of any Hazardous Material. All Services have been priced and agreed to by SIEMENS in reliance on Client's representations as set forth in this Article. The presence of Hazardous Materials constitutes a change in the Work whose terms must be agreed upon by SIEMENS before its obligations hereunder will continue.

**7.2** Client shall be solely responsible for testing, abating, encapsulating, removing, remediating or neutralizing such Hazardous Materials, and for the costs thereof. Client is responsible for the proper disposal of all Hazardous Materials and Oil, including but not limited to ionization smoke detectors, ballasts, mercury bulb thermostats, used oil, contaminated filters, contaminated absorbents, or refrigerants, that at any time are present at the Work site in accordance with all applicable federal, state, and local laws, regulations, and ordinances. Even if an appropriate change order has been entered into pursuant to this Article, SIEMENS shall continue to have the right to stop the Work until the job site is free from Hazardous Materials. In such event, SIEMENS will receive an equitable extension of time to complete the Work, and compensation for delays caused by Hazardous Materials remediation. In no event shall SIEMENS be required or construed to take title, ownership or responsibility for such Oil or Hazardous Materials. Client shall sign any required waste manifests in conformance with all government regulations, listing Client as the generator of the waste.

**7.3** Client warrants that, prior to the execution of this Agreement, it shall notify SIEMENS in writing of any and all Hazardous Materials which to Client's best knowledge are present, potentially present or likely to become present at the Work site and shall provide a copy of any Work site safety policies, including but not limited to lock-out and tag procedures, laboratory procedures, chemical hygiene plan, MSDSs or other items covered or required to be disclosed or maintained by federal, state, or local laws, regulations or ordinances.

**7.4** For separate consideration of \$10 and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledge, Client shall indemnify, defend and hold SIEMENS harmless from and against any damages, losses, costs, liabilities or expenses (including attorneys' fees) arising out of any Oil or Hazardous Materials or from Client's breach of, or failure to perform its obligations under this Article.

#### **Article 8: Import / Export Indemnity**

**8.1** Client acknowledges that SIEMENS is required to comply with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal and usage of the *Work or Equipment or Services* provided under the Contract, including any export license requirements. Client agrees that such *Work or Equipment or Services* shall not at any time directly or indirectly be used, exported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with such applicable export laws and regulations. It shall be a condition of the continuing performance by SIEMENS of its obligations hereunder that compliance with such export laws and regulations be

maintained at all times. CLIENT AGREES TO INDEMNIFY AND HOLD SIEMENS HARMLESS FROM ANY AND ALL COSTS, LIABILITIES, PENALTIES, SANCTIONS AND FINES RELATED TO NON-COMPLIANCE WITH APPLICABLE EXPORT LAWS AND REGULATIONS.

The following Articles and Tables are hereby included and made part of this Exhibit D:

**Article 1: Summary of Articles**

- Article 1 Summary of Articles
- Article 2 Interior and Exterior Lighting Methodology
- Article 3 Water Conservation Methodology
- Article 4 Water Meter Installation Calculation Methodology
- Article 5 Rate schedules summary

**Table 1 – Total Estimated Savings (Units)**

Measure	Electric Energy Saved (kWh)	Natural Gas Saved (Therms)	Water Savings (CCF)	Calculated Dollar Savings
Interior Lighting	8,815			\$1,916.05
Exterior Lighting	17,753			\$3,899.19
Water Conservation		145	279	\$1,318.48
Water Meter Installation*				*22,997 CCF**
<b>Total</b>	<b>26,568</b>	<b>145</b>	<b>279</b>	<b>\$33,279.80</b>

\*The savings for water meter installation are represented by the volume of water (CCF) which is used by the residents and currently unmetered. This water will be metered and billed to the residents as a part of the project.

\*\* Since the water rates are not finalized by YCH, the annual revenue generated by billing the residents for water is not calculated.

This Agreement does not include a savings guarantee. The savings set forth in Table 1.1 are estimates only. The assumptions used for these calculations are set forth below.

This Exhibit comprising 7 pages is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

**CLIENT: Yolo County Housing**  
 Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

**SIEMENS: Siemens Industry, Inc.**  
 Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

## Article 2: Interior and Exterior Lighting Methodology

### 2.1 Sites:

- a. Yolo County Housing Main office
- b. Helen Thomson Home A
- c. Helen Thomson Home B

### 2.2. Lighting savings were calculated using following steps and assumptions:

- Energy audit for the interior and exterior lighting was performed, and a lighting survey was created as shown in Appendix 1.
- The lighting fixture wattage of existing and proposed fixtures is used in the energy savings calculations. The wattage for the existing lighting fixtures is taken from PG&E Appendix B: Table of Standard Fixture Wattages. The proposed fixture wattage is taken from the manufacturer's specification sheets.
- The lighting burn hours used for interior lighting for different spaces is estimated in the table as below:

**Table 2 – Estimated interior lighting operating hours:**

Area type	Operating hours/yr
Bedroom	1,095
Board Room	1,095
Break Room	1,095
Conference Room	1,095
Copy Room	365
Dining Room	730
Garage	365
Residence Hallway	1,095
Office Hallway	1,600
Kitchen	1,460
Laundry	365
Living Room	1,460
Maintenance Room	365
Office	1,095
Restroom	1,095
Storage Room	365

- The lighting burn hours used for exterior lighting is taken as standard hours of operation from dusk to dawn (4,100 hrs/yr).
- The site Yolo County Housing Main office is billed under commercial (A-1) rate schedule while the sites Helen Thomson Homes A and B are billed at residential (E1) rate schedule.

- The residential (E-1) utility rate taken from PG&E's E-1 rate schedule baseline tier is \$0.19979/kWh.
- Also, from PG&E's A-1 rate schedule the commercial (A-1) rate is taken as an average of summer and winter energy rates which is \$0.22/kWh.
- The following calculations determined the amount of annual electrical consumption savings:

### **Calculations**

Existing Lighting Energy Consumption:

$$\text{kWh}_{\text{EX}} = (\# \text{ Fixtures})_{\text{EX}} \times (\text{Watts/Fixture})_{\text{EX}} \times (\text{Annual Burn Hours}) / 1,000 \text{ (W/kWh)}$$

Proposed Lighting Energy Consumption:

$$\text{kWh}_{\text{PR}} = (\# \text{ Fixtures})_{\text{PR}} \times (\text{Watts/Fixture})_{\text{PR}} \times (\text{Annual Burn Hours}) / 1,000 \text{ (W/kWh)}$$

Annual Lighting Power Consumption Savings:

$$[\text{kWh}_{\text{LGHT}}] = \text{kWh}_{\text{EX}} - \text{kWh}_{\text{PR}}$$

Annual Cost Savings:

$$\text{\$ Savings} = \text{kWh}_{\text{LGHT}} * \text{Blended Electrical Energy Rate}$$

A copy of the energy savings calculation is included at the end of this Exhibit as Appendix 1.

## **Article 3: Water Conservation Methodology**

### 3.1. Sites:

- a. Yolo County Housing Main office
- b. Helen Thomson Home A
- c. Helen Thomson Home B
- d. Davis Solar Homes

3.2. Water management savings were calculated using the following steps and assumptions:

- Existing flow rates for various fixtures listed were sampled during the energy audits and extrapolated for all the other location fixtures, which were not sampled.
- Calculations:  
Annual Water Savings (Gallons):

$$\text{Toilets and Urinals} = (\text{Pre Gallons per Flush} - \text{Post Gallons per Flush}) \times \text{Frequency per Occupant} \times \text{Number of Occupants per Day} \times \text{Days per Year}$$

Restroom Sinks / Shower Heads = (Pre GPM Flow Rate– Post GPM Flow Rate) x Avg. Time of Use x Frequency per Occupant x Number of Occupants per Day x Days per Year

Dish Sink = (Pre GPM Flow Rate– Post GPM Flow Rate) x Avg. Time of Use per Day x Days per Year

Annual Heating Saving (MMBTU) = Gallons per Year x (Hot Water Temperature – City/Well Water Temperature) x 8.346 lbs/gal / Heater Efficiency / 1,000,000

Annual Dollar Saving (\$) = (Gallons Saved) x (\$/gal Water Rate + \$/gal Sewer Rate\*) + MMBTU Savings x (1/MMBTU/Unit of Fuel) x \$/ Unit of Fuel\*\*

\* The sewer utility rate is added in the dollar savings only for the sites where the sewer bills vary by the amount water consumption.

\*\*The gas savings are not taken for Davis Solar Homes because the Yolo County Housing pays only the water bills for this site. The gas bills are paid by the residents themselves. Therefore, installing low flow water fixtures will not gain any gas savings for the Yolo County Housing.

#### Calculations Variables Index / Baseline Values

- Number of Building Occupants at Yolo County Main office: 30
- Number of Building Occupants at Helen Thomson Home A: 4
- Number of Building Occupants at Helen Thomson Home B: 4
- Number of Building Occupants at Davis Solar Homes: 30
  
- Average Sink Water Temperature :- 105°F
- Average Shower Water Temperature :- 105°F
- Average Dish Rinse Sink Temperature :- 105°F
- Average City Supply Water Temperature :- 67°F
- Water Heater System Efficiency = 62%
- MMBTUs per Unit of Fuel = 1.028 MMBTU / MCF
- Density of Water = 8.346 Lbs per Gallon
  
- It is estimated that a frequency of restroom usage per person is once in every 2.5 hours, and the average hours a person is awake is 14 hours/day. The restroom sink faucet ON time per restroom usage is estimated to be 12 seconds.
  
- Average water consumption per shower and per sink is estimated to be 10 minutes per day respectively.
  
- The water utility rate and the utility provider for different sites is detailed in the table below:

**Table 3 – Variable Water and Sewer Rates**

Site	Water/Sewer service provider	Variable water rate (\$/ccf)	Variable Sewer Rate (\$/ccf)
Yolo County Housing Main office	City of Woodland	\$ 4.56	
Helen Thomson Home A	City of Woodland	\$ 2.84	
Helen Thomson Home B	City of West Sacramento	\$ 7.14	
Davis Solar Homes	City of Davis	\$ 3.30	\$0.68

**Article 4: Water Meter Installation Methodology:**

4.1. Water meter installation is proposed for the sites listed in the Table 4 below:

**Table 4.1: Sites for Water meter installation**

AMP	Site	Location	# Units	# of water meters to be installed	Notes
AMP-1	Ridgecut Homes	9840 South Oak Grove Ave, Knights Landing CA	10	10	All 5/8" X 3/4" Meters (1 per Unit)
	Yolito	37637 Washington Street, Yolo CA	10	10	All 5/8" X 3/4" Meters (1 per Unit)
AMP-2	El Rio Villa 1	Fredricks Drive, Winters, CA	30	30	All 5/8" X 3/4" Meters (1 per Unit)
	El Rio Villa 2	Myrtle Drive, Winters CA	26	24	5/8" X 3/4" Meters (22 Units); 1" Meters (2 Units)
	El Rio Villa 3	Owings Ct, Winters CA	50	50	All 5/8" X 3/4" Meters (1 per Unit)
	El Rio Villa 4	Purtell Place, Winters CA	18	18	All 5/8" X 3/4" Meters (1 per Unit)
	Vista Montecito	26441 Madison Street, Esparto CA	16	16	All 5/8" X 3/4" Meters (1 per Unit)
<b>TOTAL</b>			<b>160</b>	<b>158</b>	

- Water meters are proposed to be installed in the HUD sites listed above, which are currently not metered per Appendix C.
- All the units are proposed to be metered separately except for four units at El Rio Villa 2.
- The meters measuring water consumption for each unit separately are sized as 5/8" X 3/4" meters.
- At El Rio Villa 2, two residential units will be tied to one 1" meter, and two other residential units will be tied to another 1" meter.

- Since the units are not currently metered, there is no water consumption data available for these sites. Residents are not charged for water and sewer currently.
- After installation of water meters, the revenue shall be generated upon metering and charging the residents for their water consumption.
- The estimate of water consumption by unit type is taken from Richland Housing Authority (RHASNC), who recently installed water meters for their unmetered units. RHASNC is located in the nearby area from Yolo County Housing and have similar unit types as well as similar climate type as the Yolo County Housing.
- The monthly metered consumption data was collected from Feb 2016 to Feb 2017 for each unit, and the average monthly consumption was calculated by unit type. This consumption per unit type was further reduced by applying a factor of safety of **62.7%**.
- The value 62.7% was estimated by comparing water consumption of (6) 3 bedroom units and (1) 4 bedroom unit belonging to one of the Yolo County Housing sites called Davis Solar Homes, where the units are metered individually by the City of Davis.
- Based on the RHASNC metered consumption from Feb 2016 to Feb 2017, following Table 4.2 shows the actual monthly average water consumption by unit type, as well as the estimated yearly water consumption (CCF), upon applying the safety factor of **62.7%** for the sites detailed in Table 4.1

**Table 4.2 Water consumption Estimates**

<b>Unit Type</b>	<b>Monthly Average CCF</b>	<b>Estimated Yearly Consumption applying Safety Factor (CCF)</b>
1 Bedroom	9.3	70.3
2 Bedroom	15.6	117.0
3 Bedroom	22.5	169.1
4 Bedroom	23.4	176.3
5 Bedroom	31.1	234.0

- The number of units in each development (site) for this measure is listed in the Table 4.3 below:

**Table 4.3 Number of Bedrooms in Each Development**

	1 Bedroom	2 Bedroom	3 Bedroom	4 Bedroom	5 Bedroom
Ridgecut		4	6		
Yolito		4	6		
Vista Montecito		8	8		
El Rio Villa 1	4	14	10	2	
El Rio Villa 2	2	12	8	4	
El Rio Villa 3	10	10	20	8	2
El Rio Villa 4			18		
<b>TOTAL</b>	<b>16</b>	<b>52</b>	<b>76</b>	<b>14</b>	<b>2</b>

- Based on Tables 4.2 and 4.3, the estimated potential water consumption which Yolo County Housing would be able to bill to their residents is about **22,997.9 ccf**.
- Since the water rates are not finalized by YCH, the annual revenue generated by billing the residents for water is not calculated.

**Article 5: Rate Schedule Summary**

Table 5.1 below shows the utility rate for electricity, gas, water and sewer.

**Table 5.1: Utility Rates**

Site	Electric Utility Rate	Gas Utility Rate	Water utility Rate (\$/CCF)	Sewer Rate (\$/CCF)
Yolo County Housing Main office	\$0.22000	\$0.9966	\$4.56	N/A
Helen Thomson Home A	\$0.19979	\$1.2897	\$2.84	N/A
Helen Thomson Home B	\$0.19979	\$1.2897	\$7.14	N/A
Davis Solar Homes	N/A	N/A	\$3.30	\$0.68

- The electric and gas rates shown for Yolo County Housing are commercial rates (A1X and GNR1 respectively).
- The electric and gas rates for all other sites are residential rates (E1 and G1S respectively).
- The water rates are calculated taking three years average water rates from their utility bills. The water and sewer rates indicated above pertain to variable water rates only, which varies based on the water consumption. The sites where sewer charge is indicated as N/A implies that the city charges sewer bills based on fixed rates.

Yolo County Housing  
Yolo County, California

Meeting Date: May 24, 2017

To: County Counsel ✓  
Yolo County Housing ✓

11.

Review and Approve Resolution for the Purchase of Four Solar Power Arrays for Yolano Village, Donnelly Circle, Riverbend Senior Manor 1 and El Rio Villas and Authorize the CEO to Execute Agreements (Gillette, Baker)

Minute Order No. 17-27: Approved recommended action by **Resolution No. 17-05**.

MOTION: Vanderford. SECOND: Wienecke-Friedman. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.



## ***Yolo County Housing***

**Lisa A. Baker, Chief Executive Officer**

147 W. Main Street      Woodland: (530) 662-5428  
WOODLAND, CA 95695      Sacramento: (916) 444-8982  
TTY: (800) 545-1833, ext. 626

DATE:            May 24, 2017  
TO:              YCH Housing Commission  
FROM:           Lisa A. Baker, CEO  
                    James D. Gillette, Finance Director  
SUBJECT:       **Review and Approve Resolution for the Purchase of Four Solar Power  
                    Arrays for Yolano Village, Donnelly Circle, Riverbend Senior Manor 1 and El  
                    Rio Villas and Authorize the CEO to Execute Agreements**

### **RECOMMENDED ACTIONS:**

That the Housing Commission:

- 1) Review the attached installation agreement and lease purchase financing proposal for the four solar arrays; and
- 2) Approve Resolution for the purchase of four solar power arrays; and
- 3) Authorize the CEO to execute the final version subject to review and concurrence of legal counsel.

### **BACKGROUND / DISCUSSION:**

In 2013, YCH set out to improve energy efficiency and take advantage of the Energy Performance Contract financing program through HUD for its public housing sites. Since that time, this initial plan has morphed into a portfolio-wide program with three basic structures:

1. **Solar Arrays:** Financed with debt repaid monthly utility cost (discussed in detail below)
2. **HUD EPC:** Lighting and water conservation improvements on public housing sites financed with debt repaid by the savings generated by the improvements (discussed in a separate report).

Working together to provide quality affordable housing and community development services for all

3. **Non-HUD:** Lighting and water conservation improvements to non-HUD properties financed with a combination of debt and reserves repaid by the savings generated by the improvements (discussed in a separate report).

This project is comprised of 4 separate arrays designed to produce 1,101,384 kWh of electricity which is estimated to generate \$218,960 of generated value in year one, increasing each year thereafter based on expected increases in the published PG&E rate (E-1) over time. The production rates are based on the PVsyst software, which is an industry standard that utilizes location and orientation of the system along with degradation factors based on the National Renewable Energy Laboratory estimates at a rate of 0.5%-0.8% annually. See Exhibit D to the attached agreement for further details.

The cost of this project is \$2,892,175 of which Siemens Industry, Inc. helped YCH to secure a \$587,701 Multifamily Affordable Solar Housing (MASH) grant through PG&E and an equipment loan from PNC bank at 3.18% fixed rate over 15 years plus 12 months of construction. This loan will be secured by the equipment, rather than the land or improvements, so staff anticipates that a Section 30 approval will not be required from HUD and are currently awaiting confirmation of this from the HUD field office in San Francisco.

As noted in the attached pro-forma analysis, staff anticipates initial annual service costs of \$7,000 to maintain the arrays, which is expected to gradually increase over time. This cost was derived based on actual maintenance and ongoing service costs incurred by owners of similar systems.

The electricity generated from these systems on a monthly basis will be allocated and credited on each tenant's PG&E bill. Such savings will then be billed to each tenant with that money going to fund the monthly note payments.

### **FISCAL IMPACT:**

As shown in the attached pro-forma analysis, the income from the energy produced and billed to the tenants will be used to fund the debt service payments and operating costs, which is expected to spin off net positive cashflow of about \$52,000 per year. This positive cashflow is essentially a contingency that will increase or decrease each year based on actual electricity production and PG&E rates. Staff believes this pro-forma to be fairly conservative and that over the expected 20 year life of this project, a total net cashflow of over \$2.5 million should be attained. There will be no additional financial impact to tenants as the solar generated rate will be at or below existing PG&E rates.

### **CONCLUSION:**

Staff recommends that the board authorize the CEO execute to the final version of the Installation and Lease Purchase agreements after review of final language by legal counsel.

Attachments: Solar Project Pro-forma Dated 5/12/2017  
MASH Solar Installation Agreement  
PNC Lease Purchase Finance Proposal



## ***Yolo County Housing***

**Lisa A. Baker, Chief Executive Officer**

147 W. Main Street      Woodland: (530) 662-5428  
WOODLAND, CA 95695      Sacramento: (916) 444-8982  
TTY: (800) 545-1833, ext. 626

DATE:      May 24, 2017  
TO:      YCH Housing Commission  
FROM:      Lisa A. Baker, CEO  
            James D. Gillette, Finance Director  
SUBJECT:      **Review and Approve the Purchase of Four Solar Power Arrays for Yolano Village, Donnelly Circle, Riverbend Senior Manor 1 and El Rio Villas and Authorize the CEO to Execute Agreements**

### **RECOMMENDED ACTIONS:**

That the Housing Commission:

- 1) Review and the attached installation agreement and lease purchase financing proposal for the four solar arrays; and
- 2) Authorize the CEO to execute the final version subject to review and concurrence of legal counsel.

### **BACKGROUND / DISCUSSION:**

In 2013, YCH set out to improve energy efficiency and take advantage of the Energy Performance Contract financing program through HUD for its public housing sites. Since that time, this initial plan has morphed into a portfolio-wide program with three basic structures:

1. **Solar Arrays:** Financed with debt repaid monthly utility cost (discussed in detail below)
2. **HUD EPC:** Lighting and water conservation improvements on public housing sites financed with debt repaid by the savings generated by the improvements (discussed in a separate report).
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This project is comprised of 4 separate arrays designed to produce 1,101,384 kWh of electricity which is estimated to generate \$218,960 of generated value in year one, increasing each year thereafter based on expected increases in the published PG&E rate (E-1) over time. The production rates are based on the PVsyst software, which is an industry standard that utilizes location and orientation of the system along with degradation factors based on the National Renewable Energy Laboratory estimates at a rate of 0.5%-0.8% annually. See Exhibit D to the attached agreement for further details.

The cost of this project is \$2,892,175 of which Siemens Industry, Inc. helped YCH to secure a \$587,701 Multifamily Affordable Solar Housing (MASH) grant through PG&E and an equipment loan from PNC bank at 3.18% fixed rate over 15 years plus 12 months of construction. This loan will be secured by the equipment, rather than the land or improvements, so staff anticipates that a Section 30 approval will not be required from HUD and are currently awaiting confirmation of this from the HUD field office in San Francisco.

As noted in the attached pro-forma analysis, staff anticipates initial annual service costs of \$7,000 to maintain the arrays, which is expected to gradually increase over time. This cost was derived based on actual maintenance and ongoing service costs incurred by owners of similar systems.

The electricity generated from these systems on a monthly basis will be allocated and credited on each tenant's PG&E bill. Such savings will then be billed to each tenant with that money going to fund the monthly note payments.

#### **FISCAL IMPACT:**

As shown in the attached pro-forma analysis, the income from the energy produced and billed to the tenants will be used to fund the debt service payments and operating costs, which is expected to spin off net positive cashflow of about \$52,000 per year. This positive cashflow is essentially a contingency that will increase or decrease each year based on actual electricity production and PG&E rates. Staff believes this pro-forma to be fairly conservative and that over the expected 20 year life of this project, a total net cashflow of over \$2.5 million should be attained. There will be no additional financial impact to tenants as the solar generated rate will be at or below existing PG&E rates.

#### **CONCLUSION:**

Staff recommends that the board authorize the CEO execute to the final version of the Installation and Lease Purchase agreements after review of final language by legal counsel.

Housing Commission  
May 24, 2017  
Page 3

Attachments: Solar Project Pro-forma Dated 5/12/2017

MASH Solar Installation Agreement

PNC Lease Purchase Finance Proposal

**FILED**

JUN 07 2017

BY Julie Pacheco  
DEPUTY CLERK OF THE BOARD

YOLO COUNTY HOUSING  
RESOLUTION NO. 17- 05

A RESOLUTION OF THE BOARD OF COMMISSIONERS OF THE HOUSING AUTHORITY OF THE COUNTY OF YOLO APPROVING FOUR SOLAR POWER ARRAYS AT YOLANO VILLAGE, DONNELLY CIRCLE, RIVERVBEND MANOR 1 AND EL RIO VILLAS, INCLUDING THE AUTHORIZATION FOR FINANCING THE PROJECT THROUGH PNC EQUIPMENT FINANCE, LLC

WHEREAS, the YCH Housing Commission authorized staff to enter into a Memorandum of Understanding (MOU) with the Housing Authorities of Butte and Sutter Counties to procure an Energy Services Consultant to look at energy saving opportunities in May 2010; and

WHEREAS, a Request for Proposals was issued in February 2012 for interested Energy Services Companies to explore energy saving opportunities for the Housing Authority; and

WHEREAS, in 2012 the Housing Commission approved the selection of Siemens Industry, Inc. as the Energy Services Company to provide the desired services; and

WHEREAS, Siemens Industry, Inc. was successful in securing grant funds in the amount of \$587,701 from PG&E's Multi-family Affordable Solar Housing program(MASH); and

WHEREAS, Siemens Industry, Inc. issued a Request for Proposals on behalf of the Housing Authority in April 2017 for financing the balance of the project. Many inquiries were made but only one formal proposal was received, from PNC Equipment Finance, LLC; and

WHEREAS, Siemens Industry, Inc. is the vendor who will conduct all surveying, secure local approvals, and installation of the solar arrays, water conservation measures, electrical lighting LED upgrades, and meet all project milestones with PG&E; and

WHEREAS, the project will provide services to YCH units located in Woodland at Yolano Village and Donnelly Circle, in West Sacramento at Riverbend Manor 1 and in unincorporated Yolo outside of the City of Winters at El Rio Villas,

NOW, THEREFORE, BE IT RESOLVED that the Housing Commission of the Housing Authority of the County of Yolo approve the four solar array project and approve the construction period amortization schedule proposal from PNC Equipment Finance, LLC, for the financing of the project, and approve the installation agreement from Siemens Industry, Inc., and authorize the CEO or designee to execute the acceptance of the proposal and all required loan, and project documents.

**EFFECTIVE DATES:** This Resolution shall take effect from and after the date of its adoption.

**PASSED AND ADOPTED,** by the Housing Commission of the Housing Authority of the County of Yolo, State of California, this 24<sup>th</sup> day of May, 2017 by the following vote:

**AYES:** Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman.

**NOES:** None.

**ABSTAIN:** None.

**ABSENT:** Barajas, Thomson.



\_\_\_\_\_  
Mark Johannessen, Chair  
Housing Commission of the  
Housing Authority of the County of Yolo  
Approved as to Form:

By Hope P. Welton  
\_\_\_\_\_  
Hope Welton, Agency Counsel

Attest:

Julie Dachtler, Agency Clerk  
Housing Commission of the  
Housing Authority of the County of Yolo

By Julie Dachtler



Please see footnotes below

Year	Energy Savings/ Add'l Billing	Solar Panel Degradation	Gross Savings	Principal & Interest	Ongoing Support	Program Costs	Annual Contribution	Annual Net Cashflow	Cumulative Net Cashflow
Constr.	\$ 74,029		\$ 74,029					\$ 74,029	\$ 74,029
Mash Grant			\$ 587,701	\$ 587,701				\$ -	
1	\$ 218,960		\$ 218,960	\$ 159,960	\$ 7,000	\$ 166,960		\$ 52,000	\$ 126,029
2	\$ 225,529	\$ (133)	\$ 225,396	\$ 166,186	\$ 7,210	\$ 173,396		\$ 52,000	\$ 178,029
3	\$ 232,295	\$ (275)	\$ 232,020	\$ 172,593	\$ 7,426	\$ 180,020		\$ 52,000	\$ 230,029
4	\$ 239,264	\$ (424)	\$ 238,840	\$ 179,190	\$ 7,649	\$ 186,839		\$ 52,000	\$ 282,029
5	\$ 246,441	\$ (583)	\$ 245,858	\$ 185,980	\$ 7,879	\$ 193,858		\$ 52,000	\$ 334,029
6	\$ 253,835	\$ (750)	\$ 253,085	\$ 192,970	\$ 8,115	\$ 201,085		\$ 52,000	\$ 386,029
7	\$ 261,450	\$ (927)	\$ 260,523	\$ 200,164	\$ 8,358	\$ 208,523		\$ 52,000	\$ 438,029
8	\$ 269,293	\$ (1,113)	\$ 268,180	\$ 207,571	\$ 8,609	\$ 216,180		\$ 52,000	\$ 490,029
9	\$ 277,372	\$ (1,310)	\$ 276,062	\$ 215,195	\$ 8,867	\$ 224,062		\$ 52,000	\$ 542,029
10	\$ 285,693	\$ (1,517)	\$ 284,176	\$ 223,043	\$ 9,133	\$ 232,176		\$ 52,000	\$ 594,029
11	\$ 294,264	\$ (1,736)	\$ 292,528	\$ 231,120	\$ 9,407	\$ 240,528		\$ 52,000	\$ 646,029
12	\$ 303,092	\$ (69,450)	\$ 233,642	\$ 171,952	\$ 9,690	\$ 181,642		\$ 52,000	\$ 698,029
13	\$ 312,185	\$ (2,208)	\$ 309,977	\$ 247,996	\$ 9,980	\$ 257,977		\$ 52,000	\$ 750,029
14	\$ 321,550	\$ (2,463)	\$ 319,087	\$ 256,807	\$ 10,280	\$ 267,087		\$ 52,000	\$ 802,029
15	\$ 331,197	\$ (2,731)	\$ 328,466	\$ 270,847	\$ 10,588	\$ 281,436		\$ 47,030	\$ 849,059
16	\$ 341,133	\$ (2,813)	\$ 338,320	\$ -	\$ 10,906	\$ 10,906		\$ 327,414	\$ 1,176,473
17	\$ 351,367	\$ (2,897)	\$ 348,470	\$ -	\$ 11,233	\$ 11,233		\$ 337,237	\$ 1,513,709
18	\$ 361,908	\$ (2,984)	\$ 358,924	\$ -	\$ 11,570	\$ 11,570		\$ 347,354	\$ 1,861,063
19	\$ 372,765	\$ (3,074)	\$ 369,691	\$ -	\$ 11,917	\$ 11,917		\$ 357,774	\$ 2,218,837
20	\$ 383,948	\$ (3,166)	\$ 380,782	\$ -	\$ 12,275	\$ 12,275		\$ 368,507	\$ 2,587,344
	\$ 5,957,566	\$ (100,554)	\$ 5,782,983	\$ 3,669,277	\$ 188,093	\$ 3,269,668	\$ -	\$ 2,587,344	

Program Cost  
MASH Grant - to be paid to lender  
Bank Fees  
Amount Financed

\$ 2,892,175.00
\$ 587,701.00
\$ 1,900.00
\$ 2,894,075.00

Annual Interest Rate  
Finance Period  
Payments per Year  
Total Interest Expense

3.180%
15 + 1 yr constr
12
\$ 775,201.64

Annual Program Savings  
Simple Payback (years)

\$ 218,960.00
13.2

Electricity Escalation  
Natural Gas Escalation  
Water Escalation  
Fuel / Other Escalation  
Operational Escalation  
Service Escalation

3.0%
3.0%
3.0%
3.0%

Footnotes:

- (1) Siemens is implementing energy efficiency improvements in several YCH properties which will not be financed. Those improvements will result in additional annual operational savings of \$2,000 in year one.
- (2) Solar degradation has been studied by the National Renewable Energy Laboratory and determined to be between 0.5% - 0.8% annually. The proposed panels have a 20 year warranty, but the financial model assumes that the panels will produce 0.5% less electricity every year.
- (3) The project cost column titled "Ongoing Support" represents the estimated annual service costs to maintain the solar arrays. These costs may include cleaning and occasional maintenance (wire re-connections, repairs to modems for data communications, weed abatement, etc.) The "On-Going Support" column represents a best estimate of the costs that YCH will incur for these services based on other Projects and conversations with Service Providers. Additionally the financial model considers replacement of the inverters in year 12.



**SIEMENS INDUSTRY, INC., BUILDING TECHNOLOGIES DIVISION**

*SCOPE OF WORK AND SERVICES - EXHIBIT A*

**Article 1: Scope of Work**

1.1. *Description:* Except as otherwise expressly provided herein, SIEMENS shall provide each and every item of cost and expense necessary for: implementation of the FIMS described in Section 1.2, below. Work will be based on California Prevailing wage requirements as approved by the CLIENT. CLIENT to provide adequate site access and appropriate area on site for contractor staging and storage.

1.2. *Specific Elements: The Work shall include the following:*

**1.2.1 Photovoltaic (PV) Solar Array at Yolo County Housing Authority**

SIEMENS will install a PV ground mount solar systems at the following sites: (i) field between Yolano Village and Donnelly Circle on Donnelly Circle, Woodland CA 95776 (“Woodland Site”); (ii) Riverbend Sr. Manor 1 at 664 Cummins Way, West Sacramento CA 95605 (“West Sacramento Site”); and (iii) El Rio Villa in field behind Fredricks Dr, Winters CA 95694 (“El Rio Villa Site”).

**Solar Array Locations:**

Yolano Village / Donnelly Circle array will be located in northwestern most field of Assessor Parcel Number 063 060 004 outlined below.



Exhibit A - Scope of Work and Services  
Yolo County Housing Authority - Solar

---

Riverbend Sr. Manor 1 Array is located in the northeastern most field of Assessor Parcel Number 014 630 016 outlined below.



El Rio Villa Array is located in the eastern most field of Assessor Parcel Number 038 070 006 outlined below.



## **Solar Array and Components:**

### **Preliminary and 100% Design**

- SIEMENS has performed a preliminary design and layout of the PV array. SIEMENS has completed a Pre-Application Report for Generator Interconnection to PG&E and obtained preliminary design review from PG&E. .
  - The current scope of work and project pricing is based on a solar system sizing of 332kW DC, using 50kW string inverters, 79kW DC, using 15kW string inverters and 256kW DC, using 50kW string inverters as shown in Appendix 1.
  - Upon contract execution, SIEMENS will perform a 100% design which will determine the final Bill of Materials for the PV system.
    - As part of the 100% design, SIEMENS will conduct a geotech/soils study for the ground mount array if required. The geotechnical study will verify the existing soils conditions.
    - Siemens will complete the electrical design and provide 100% electrical drawings stamped by a licensed California Registered Electrical Professional Engineer. The System & installation will meet the requirements for interconnection with appropriate documentation

### **CEQA Process:**

Based on representations of Yolo County and City of Woodland, the parties reasonably assume that no permitting under the California Environmental Quality Act ("CEQA") will be required for the Woodland Site or El Rio Villa Site.

For the West Sacramento Site, SIEMENS will retain an engineering firm to complete an initial investigation and submit an application for CEQA determination. In the event the application results in anything other than an unconditional Negative Declaration, the parties will proceed in accordance with Article 5.A of the Agreement.

### **Racking System**

- SIEMENS to install racking oriented as per 100% design documents.

### **Photovoltaic Modules**

- SIEMENS will install Rensola solar modules or equivalent per 100% design documents.

### **Inverters**

- SIEMENS will Install SMA Core1 50 or equivalent string inverters per 100% design documents for ground mount systems greater than 100kW.
- SIEMENS will install Fronius Symo 15 or equivalent string inverters per 100% design documents for ground mount system less than 100kW.
- SIEMENS will furnish and install PV combiner panel(s) as required per 100% design documents.

### **Accessories**

- SIEMENS will furnish and install wiring needed for installation. Exposed wiring will be housed in wire management system and outdoor UV rated.
- SIEMENS will furnish and install DC / AC disconnects as per 100% design.
- SIEMENS will furnish and Install required data monitoring equipment and accessories for a fully functional Revenue Grade DAS (Data Acquisition System) and Weather Station platform.
- SIEMENS will provide Testing and Commissioning upon completion.

### **Interconnection:**

- SIEMENS proposes to request new PG&E service for the interconnection.
- Siemens will submit the interconnection application to PG&E following the 100% system design.
- SIEMENS will assist the CLIENT in applying for the Multifamily Affordable Solar Housing (MASH) Program to obtain incentives.

### **General Construction:**

- SIEMENS intends to install 7' chain link or 6' chain link fence with 3-strand fencing with a truck gate around the array.
- SIEMENS will provide start-up and testing for panels and inverters in conjunction with manufacturer
- SIEMENS will provide commissioning to ensure proper functioning of panels, inverter, and monitoring system
- SIEMENS will participate in punch-list walkthroughs with facility personnel and ensure completion of punch-list items as applicable
- SIEMENS will be responsible for final job site clean-up as it relates to SIEMENS scope of work
- SIEMENS will generate as-built plans and resubmit as necessary to Approval Agency

### **Assumptions/Exclusions/Clarifications**

- SIEMENS' pricing is based on the sizing and system components stated above.
- Siemens' pricing does not include: (i) costs for any CEQA-related activities for the Wodland Site or El Rio Villa Site; (ii) any other unforeseen costs relating to permitting process for these Sites.

- Site Grading is not included in SIEMENS' scope.
- Mitigating unforeseen conditions uncovered during soils testing such as ground contamination or hazardous material abatement is excluded. Additional field changes or upgrades to the structure in order to support the PV modules based on unforeseen soil conditions are also excluded.
- All underground utilities to be identified by CLIENT prior to construction. SIEMENS will not be responsible for damage for unmarked underground utilities.
- Design or Construction work and/or services related to correcting and/or mitigating any pre-existing federal or state statutory violations are excluded.
- Standard manufacturer's warranty applies to all specified product.
- Any extra or spare parts are excluded
- Overtime work is excluded.
- Since rebates and other incentives are paid for by a third party (PG&E), SIEMENS cannot guarantee the incentives, but will provide work necessary in a timely manner to help to secure the funds. The CLIENT acknowledges that: (i) any incentive that may be available to the CLIENT to pay the costs of the work will be granted by a third party outside the control of SIEMENS; (ii) lack of availability of such incentives shall not relieve the CLIENT of its payment obligations under this Agreement.

1.3 CLIENT's Responsibilities (in addition to those in Article 3 of the Agreement):

- CLIENT to provide unlimited site access during construction.

**Article 2: Work Implementation Period**

- 2.1 SIEMENS shall commence the Work within thirty (30) days of contract execution, shall perform the Work diligently and shall complete the Work within 12 months of commencement.
- 2.2 SIEMENS construction schedule is based on the assumption that:
  - 2.2.1 PG&E will complete the final interconnection process within 20 working days of SIEMENS' submission of the final request for interconnection; and

Any delays in performance of the activities set forth in Sections 2.2.1 hereof, shall be treated in accordance with Section 5.1 of the Agreement.

**Article 3: Scope of Services-Maintenance Services Program**

(Please check one box only)

- CLIENT has elected to self-implement maintenance. Therefore SIEMENS shall not perform any on-going maintenance services, although the Parties may negotiate a separate agreement for such services at a later date.

By signing below, this Exhibit is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

**CLIENT:**            **Yolo County Housing Authority (YCHA)**  
Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**SIEMENS:**            **Siemens Industry, Inc.**  
Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_  
  
Signature: \_\_\_\_\_  
Printed Name: \_\_\_\_\_  
Title: \_\_\_\_\_  
Date: \_\_\_\_\_

**SIEMENS INDUSTRY, INC., BUILDING TECHNOLOGIES DIVISION**

*PAYMENT SCHEDULES - EXHIBIT B*

**Article 1: Payment for Scope of Work**

- 1.1 **Price:** As full consideration of the Work as described in Exhibit A, Article 1: Scope of Work, the CLIENT shall pay to SIEMENS \$2,892,175 (plus taxes, if applicable).
- 1.2 **Escrow:** The CLIENT has agreed to deposit the Price into an Escrow Account at a financial institution satisfactory to both the CLIENT and SIEMENS. All expenses to establish the Escrow Account shall be the complete responsibility of the CLIENT and the CLIENT will receive all interest earnings from the Escrow Account. SIEMENS will submit periodic invoices to the CLIENT based on the Payment Schedule in Table B.1 below. The CLIENT shall be responsible for submitting the necessary documents to the Escrow Agent to allow for timely disbursements from the Escrow Account. The funding of the Escrow Account in an amount equal to or greater than the Price stated in Article 1.1 above shall be a condition precedent to SIEMENS obligation to perform or to continue the performance of the Work. If the Escrow Account is not funded within 15 days of the execution of this Agreement, this Agreement shall be null and void. This 15 day funding period may be extended as mutually agreed in writing by the Parties. In the event that the Agreement becomes null and void as described in this paragraph and CLIENT has previously authorized SIEMENS to proceed with the Work, the CLIENT shall be obligated to reimburse SIEMENS either: (i) for the Work performed to date; or (ii) for the Work specifically authorized by the CLIENT.
- 1.3 **Timely Payments:** The CLIENT agrees to pay SIEMENS per Table B.1 below. CLIENT agrees to pay all invoices submitted by SIEMENS per Article 4 of the Agreement.

**Table B.1 – FIM Work Payment Schedule**

Project Phase	Payments (\$)	Payments (%)	Schedule
Mobilization	\$867,652	30.0%	30 Days after Contract Signature
Substantial Completion	\$1,879,914	65.0%	Monthly Progress Billing
Final Completion	\$144,609	5%	
<b>PROJECT TOTAL:</b>	<b>\$2,892,175</b>	<b>100.0%</b>	

Article 1 of Exhibit B is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

**CLIENT: Yolo County Housing Authority (YCHA)**

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

**SIEMENS: Siemens Industry, Inc.**

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

Signature: \_\_\_\_\_  
 Printed Name: \_\_\_\_\_  
 Title: \_\_\_\_\_  
 Date: \_\_\_\_\_

## EXHIBIT C

### TERMS AND CONDITIONS

#### Article 1: General

1.1 (a) The Agreement, including all Exhibits and Appendices thereto, constitutes the entire, complete and exclusive agreement between the parties relating to the services ("Services") and the equipment, materials, parts, supplies and software (collectively "Product") to be provided by SIEMENS as described in Exhibit A (such Services and Product collectively referred to as "Work") and shall supersede and cancel all prior agreements and understandings, written or oral, relating to the subject matter of the Agreement. Neither party may assign the Agreement or any rights or obligations hereunder without the prior written consent of the other, except that either party may assign this Agreement to its affiliates and SIEMENS may grant a security interest in the Agreement; assign proceeds of the Agreement; and/or use subcontractors in performance of the Work.

(b) The terms and conditions of this Agreement shall not be modified or rescinded except in writing, signed by a corporate officer of SIEMENS and representative of Client. SIEMENS' and Client's performance under this Agreement is expressly conditioned on the terms of this Agreement, notwithstanding any different or additional terms contained in any writing at any time submitted or to be submitted to SIEMENS by Client relating to the Work.

(c) The terms and conditions set forth herein shall supersede, govern and control any conflicting terms of the Proposed Solution or the Proposal.

(d) Nothing contained in this Agreement shall be construed to give any rights or benefits to anyone other than the Client and SIEMENS without the express written consent of both parties. All provisions of this Agreement allocating responsibility or liability between the parties shall survive the completion of the Work and termination of this Agreement.

1.2 This Agreement shall be governed by and enforced in accordance with the laws of the State of California. Any litigation arising under this Agreement shall be brought in the State or Commonwealth in which the Work is being provided to Client. THE PARTIES KNOWINGLY AND INTELLIGENTLY WAIVE ANY RIGHT TO A JURY TRIAL ON MATTERS ARISING OUT OF THIS AGREEMENT.

#### Article 2: Work by SIEMENS

2.1 SIEMENS will perform the Work expressly described in Exhibit A (including any change orders thereto mutually agreed upon in writing) issued under this Agreement and signed by both parties. The Work shall be performed in a manner consistent with the degree of care and skill ordinarily exercised by reputable companies performing the same or similar Work in the same locale acting under similar circumstances and conditions.

2.2 SIEMENS shall perform the Work during its local, normal working hours, unless otherwise agreed in writing.

2.3 SIEMENS is not required to conduct safety or other tests, install or maintain any devices or equipment or make modifications or upgrades to any Product beyond the scope set forth in Exhibit A. Any Client request to change the scope or the nature of the Work must be in the form of a mutually agreed change order, effective only when executed by all parties hereto.

2.4 All reports and drawings specifically prepared for and deliverable to Client pursuant to Exhibit A ("Deliverables") shall become Client's property upon full payment to SIEMENS. SIEMENS may retain file copies of such Deliverables. All other reports, notes, calculations, data, drawings, estimates, specifications, manuals, other documents and all computer programs, codes and computerized materials prepared by or for SIEMENS are instruments of SIEMENS' work ("Instruments") and shall remain SIEMENS' property. Siemens conveys no license to software unless otherwise expressly provided in this Agreement. To the extent specified in this Agreement, Client, its employees and agents ("Permitted Users") shall have a right to make and retain copies of Instruments except uncompiled code, and to use all Instruments, provided however, the Instruments shall not be used or relied upon by any parties other than Permitted Users, and such use shall be subject to this Agreement and limited to the particular project and location for which the Instruments were provided. All Deliverables and Instruments provided to Client are for Permitted Users' use only for the purposes disclosed to SIEMENS, and Client shall not transfer them to others or use them or permit them to be used for any extension of the Work or any other project or purpose, without SIEMENS' express written consent. Any reuse of Deliverables or Instruments for other projects or locations without the written consent of SIEMENS, or use by any party other than Permitted Users, will be at Permitted Users' sole risk and without liability to SIEMENS; and, in addition to any other rights SIEMENS may have, Client shall indemnify, defend and hold SIEMENS harmless from any claims, losses or damages arising therefrom.

2.5 Client acknowledges that SIEMENS, in the normal conduct of its business, may use concepts and improved skills and know-how developed while performing other contracts. Client acknowledges the benefit which may accrue to it though this practice, and accordingly agrees that anything in this Agreement notwithstanding Siemens may continue, without payment of a royalty, this practice of using concepts and improved skills and know-how developed while performing this Agreement.

2.6 SIEMENS shall be responsible for any portion of the Work performed by any subcontractor of SIEMENS. SIEMENS shall not have any responsibility,

**Siemens Industry, Inc., Building Technologies Division.**

duty or authority to direct, supervise or oversee any employees or contractors of Client or their work or to provide the means, methods or sequence of their work or to stop their work. SIEMENS' work and/or presence at a site shall not relieve others of their responsibility to Client or to others. SIEMENS shall not be liable for the failure of Client's employees, contractors or others to fulfill their responsibilities.

#### Article 3: Responsibilities of Client

3.1 Client, without cost to SIEMENS, shall:

(a) Designate a contact person with authority to make decisions for Client regarding the Work and provide SIEMENS with information sufficient to contact such person in an emergency;

(b) Provide or arrange for reasonable access and make all provisions for SIEMENS to enter any site where Work is to be performed;

(c) Permit SIEMENS to control and/or operate all controls, systems, apparatus, equipment and machinery necessary to perform the Work;

(d) Furnish SIEMENS with all available information pertinent to the Work;

(e) Furnish SIEMENS with all approvals, permits and consents from government authorities and others as may be required for performance of the Work except for those SIEMENS has expressly agreed in writing to obtain;

(f) Maintain the Work site in a safe condition; notify SIEMENS promptly of any site conditions requiring special care; and provide SIEMENS with any available documents describing the quantity, nature, location and extent of such conditions;

(g) Comply with all laws and provide any notices required to be given to any government authorities in connection with the Work, except such notices SIEMENS has expressly agreed in writing to give;

(h) Provide SIEMENS with Material Safety Data Sheets (MSDS) conforming to OSHA requirements related to all Hazardous Materials located at the site which may impact the Work;

(i) Furnish to SIEMENS any contingency plans related to the site; and

(j) Furnish the specified operating environment, including without limitation, suitable, clean, stable, properly conditioned electrical power for the Work; telephone lines, capacity and connectivity as required by the Work; and heat, light, air conditioning and other utilities for the Work.

3.2 Client acknowledges that the technical and pricing information contained in this Agreement is confidential and proprietary to SIEMENS and agrees not to disclose it or otherwise make it available to others without SIEMENS' express written consent.

3.3 Client acknowledges that it is now and shall at all times remain in control of the Work site. Except as expressly provided herein, SIEMENS shall not be responsible for the adequacy of the health, safety or security programs or precautions related to Client's activities or operations, Client's other contractors, the work of any other person or entity, or Client's site conditions. SIEMENS is not responsible for inspecting, observing, reporting or correcting health or safety conditions or deficiencies of Client or others at Client's site. So as not to discourage SIEMENS from voluntarily addressing health or safety issues at Client's site, in the event SIEMENS does address such issues by making observations, reports, suggestions or otherwise, SIEMENS shall not be liable or responsible on account thereof.

3.4 Except as expressly stated in Exhibit A, Client is solely responsible for any removal, replacement or refinishing of the building structure or finishes that may be required to perform or gain access to the Work.

#### Article 4: Compensation

4.1 SIEMENS shall be compensated for the Work as expressly stated in Exhibit B, or, if not expressly stated, then at its prevailing rates and shall be reimbursed for costs and expenses (plus reasonable profit and overhead) incurred in performance of the Work.

4.2 SIEMENS shall invoice Client as provided in this Agreement (including any modifications), or if not expressly provided, then on a monthly or other progress billing basis. Invoices are due and payable within 25 calendar days of receipt by Client or as otherwise set forth in this Agreement. If any payment is not received when due and remains unpaid for thirty (30) days after written notice thereof, SIEMENS may deem Client to be in breach of this Agreement and may enforce any remedies available to it hereunder or at law, including without limitation, suspension or termination of the Work, and SIEMENS shall be entitled to compensation for the Work previously performed and for costs reasonably incurred in connection with the suspension or termination. Any amount not paid within ten (10) days of the date due shall accrue interest from the date due, until paid, at the rate of twelve percent (12%) per annum. Client shall reimburse SIEMENS for SIEMENS' costs and expenses (including reasonable attorneys' and witnesses' fees) incurred for collection under this Agreement. In the event Client disputes any portion or all of an invoice, it shall notify SIEMENS in writing of the amount in dispute and the reason for its disagreement within 21 days of receipt of the invoice. The undisputed portion shall be paid when due, and interest on any unpaid portion shall accrue as aforesaid, from the date due until the date of payment, to the extent that such amounts are finally determined to be payable to SIEMENS.

4.3 Except to the extent expressly agreed in this Agreement, SIEMENS' fees do not include any taxes, excises, fees, duties or other government charges related to the Work, and Client shall pay such amounts or reimburse SIEMENS for any amounts it pays. If Client claims a tax exemption or direct payment

permit, it shall provide SIEMENS with a valid exemption certificate or permit and indemnify, defend and hold SIEMENS harmless from any taxes, costs and penalties arising out of same.

#### **Article 5. Changes; Delays; Excused Performance**

**5.1** As the Work is performed, conditions may change or circumstances outside SIEMENS' reasonable control (including changes of law) or not reasonably foreseeable to SIEMENS (including unforeseen site conditions) may develop or be discovered. If such circumstances require SIEMENS to expend additional costs, effort or time to complete the Work, SIEMENS will notify Client and an equitable adjustment will be made to the compensation and time for performance. In the event conditions or circumstances require Work to be suspended or terminated, SIEMENS shall be compensated for Work performed and for costs reasonable incurred in connection with the suspension or termination.

**5.2** SIEMENS shall not be responsible for loss, delay, injury, damage or failure of performance that may be caused by circumstances beyond its control, including but not limited to acts or omissions by Client or its employees, agents or contractors, Acts of God, war, civil commotion, acts or omissions of government authorities, fire, theft, corrosion, flood, water damage, lightning, freeze-ups, strikes, lockouts, differences with workmen, riots, explosions, quarantine restrictions, delays in transportation, or shortage of vehicles, fuel, labor or materials. In the event of any such circumstances, SIEMENS shall be excused from performance of the Work and the time for performance shall be extended by a period equal to the time lost plus a reasonable recovery period and the compensation shall be equitably adjusted to compensate for additional costs SIEMENS incurs due to such circumstances.

#### **Article 5A: Amendment – West Sacramento Site**

**5A.1** The Work includes installation of solar arrays at three (3) sites, including a site located at 664 Cummins Way, West Sacramento, California ("West Sacramento Site"). As fully set forth in Exhibit A, SIEMENS' scope of Work includes submitting an initial application for a determination, under the California Environmental Quality Act ("CEQA"), whether construction of a solar array is permitted on that Site.

**5A.2** In the event the initial determination under CEQA for the West Sacramento Site results in anything other than a Negative Declaration (i.e., an unconditional declaration that construction of a solar array on that site is permissible), the parties agree to proceed as follows:

a. SIEMENS will provide a change order proposal for the West Sacramento Site which will include (i) the scope of remediation and any other work necessary to obtain permission for construction of the solar array on the Site; (ii) the additional costs for such work; and (iii) schedule impacts of such work.

b. If the Client wishes to proceed with the Work on the West Sacramento Site, then the parties will enter into a Change Order for SIEMENS to perform the work described in Section 5A.2(a) above; or

c. If the Client chooses not to proceed with the Work at the West Sacramento Site, the parties will enter into an Amendment to this Agreement deleting such Work from the scope thereof.

d. If the parties enter into an Amendment pursuant to Section 5A.2(c) above, SIEMENS' compensation hereunder will be equitably adjusted to account for the reduction in the scope of Work, provided, however, that SIEMENS shall be entitled to compensation for the Work performed to submit the initial application for CEQA determination for the West Sacramento Site.

**5A.3** The parties further agree that to prior to the initial determination under CEQA for the West Sacramento Site, SIEMENS shall perform no Work on or in connection with that Site other than the Work necessary to submit the initial application for CEQA determination for that Site.

#### **Article 6: Warranty, Allocation of Risk**

**6.1** (a) All Product manufactured by SIEMENS or bearing its nameplate is warranted to be free from defects in material and workmanship arising from normal use and service for one year from the earlier of the date installed by SIEMENS or date of first beneficial use.

(b) Labor for all Services under this Agreement is warranted to be free from defects for one year after the earlier of the date the Services are substantially completed or date of first beneficial use.

**6.2** (a) The limited warranties set forth above shall be void as to, and shall not apply to, any Work (i) repaired, altered or improperly installed by any person other than SIEMENS or its authorized representative; (ii) subjected to unreasonable or improper use or storage, used beyond rated conditions, operated other than per SIEMENS' or the manufacturer's instructions, or otherwise subjected to improper maintenance, negligence or accident; (iii) damaged because of any use of the Work after Client has, or should have had, knowledge of any defect in the Work; or (iv) Product not manufactured, fabricated and assembled by SIEMENS or not bearing SIEMENS' nameplate. SIEMENS assigns to Client, without recourse, any and all assignable warranties available from any manufacturer, supplier, or subcontractor of such Product and will assist Client in enforcement of such assigned warranties.

(b) Any claim under the limited warranty granted above must be made in writing to SIEMENS within thirty (30) days after discovery of the claimed defect. Such limited warranty only extends to Client and not to any subsequent owner of the Work. Client's sole and exclusive remedy for any Work not conforming

with this limited warranty is limited to, at SIEMENS' option, (i) repair or replacement of defective components of covered Product, or (ii) reperformance of the defective portion of the Services, or (iii) to the extent previously paid, the issuance of a credit or refund for the original purchase price of such defective component or portion of the Work.

(c) SIEMENS shall not be required to repair or replace more than the component(s) of the Work actually found to be defective. SIEMENS' warranty liability shall not exceed the purchase price of such item. Repaired or replaced Work will be warranted hereunder only for the remaining portion of the original warranty period.

**6.3** THE EXPRESS LIMITED WARRANTIES PROVIDED ABOVE ARE IN LIEU OF AND EXCLUDE ALL OTHER WARRANTIES, STATUTORY, EXPRESS, OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH ARE HEREBY EXPRESSLY DISCLAIMED. SIEMENS MAKES NO WARRANTY, EXPRESS OR IMPLIED, THAT ANYWORK PROVIDED HEREUNDER WILL PREVENT ANY LOSS, OR WILL IN ALL CASES PROVIDE THE PROTECTION FOR WHICH IT IS INSTALLED OR INTENDED. THE LIMITED EXPRESS WARRANTIES AND REPRESENTATIONS SET FORTH IN THIS AGREEMENT MAY ONLY BE MODIFIED OR SUPPLEMENTED IN A WRITING SIGNED BY A DULY AUTHORIZED CORPORATE OFFICER OF SIEMENS.

**6.4** Risk of loss of Product furnished by SIEMENS shall pass to Client upon delivery to Client's premises, and Client shall be responsible for protecting and insuring them against theft and damage. However, until SIEMENS is paid in full, SIEMENS shall retain title for security purposes only and the right to repossess the Product.

**6.5** Client hereby, for it and any parties claiming under it, releases and discharges SIEMENS from any liability arising out of all hazards covered by Client's insurance, and all claims against SIEMENS arising out of such hazards, including any right of subrogation by Client's insurance carrier, are hereby waived by Client.

**6.6** ANYTHING HEREIN NOTWITHSTANDING, IN NO EVENT SHALL EITHER PARTY BE RESPONSIBLE UNDER THIS AGREEMENT FOR INCIDENTAL, CONSEQUENTIAL, PUNITIVE, EXEMPLARY OR SPECIAL DAMAGES, INCLUDING WITHOUT LIMITATION LOST PROFITS, LOSS OF USE AND/OR LOST BUSINESS OPPORTUNITIES, WHETHER ARISING IN WARRANTY, LATE OR NON-DELIVERY OF ANY WORK, TORT, CONTRACT OR STRICT LIABILITY, AND REGARDLESS OF WHETHER EITHER PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND, IN ANY EVENT, SIEMENS' AGGREGATE LIABILITY FOR ANY AND ALL CLAIMS, LOSSES OR EXPENSES (INCLUDING ATTORNEYS FEES) ARISING OUT OF THIS AGREEMENT, OR OUT OF ANY WORK FURNISHED UNDER THIS AGREEMENT, WHETHER BASED IN CONTRACT, NEGLIGENCE, STRICT LIABILITY, AGENCY, WARRANTY, TRESPASS, INDEMNITY OR ANY OTHER THEORY OF LIABILITY, SHALL BE LIMITED TO THE LESSER OF \$1,000,000 OR THE TOTAL COMPENSATION RECEIVED BY SIEMENS FROM CLIENT UNDER THIS AGREEMENT. SIEMENS reserves the right to control the defense and settlement of any claim for which SIEMENS has an obligation to indemnify hereunder. The parties acknowledge that the price which SIEMENS has agreed to perform its Work and obligations under this Agreement is calculated based upon the foregoing limitations of liability, and that SIEMENS has expressly relied on, and would not have entered into this Agreement but for such limitations of liability.

**6.7** It is understood and agreed by and between the parties that SIEMENS is not an insurer and this Agreement is not intended to be an insurance policy or a substitute for an insurance policy. Insurance, if any, shall be obtained by Client. Fees are based solely upon the value of the Work, and are unrelated to the value of Client's property or the property of others on Client's premises.

#### **Article 7: Hazardous Materials Provisions**

**7.1** The Work does not include directly or indirectly performing or arranging for the detection, monitoring, handling, storage, removal, transportation, disposal or treatment of Oil or Hazardous Materials. Except as disclosed pursuant to this Article, Client represents that, to its best knowledge, there is no asbestos or any other hazardous or toxic materials, as defined in the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended, the regulations promulgated thereunder, and other applicable federal, state or local law ("*Hazardous Materials*"), present at Client's Sites where the Work is performed. SIEMENS will notify Client immediately if it discovers or suspects the presence of any Hazardous Material. All Services have been priced and agreed to by SIEMENS in reliance on Client's representations as set forth in this Article. The presence of Hazardous Materials constitutes a change in the Work whose terms must be agreed upon by SIEMENS before its obligations hereunder will continue.

**7.2** Client shall be solely responsible for testing, abating, encapsulating, removing, remedying or neutralizing such Hazardous Materials, and for the costs thereof. Client is responsible for the proper disposal of all Hazardous Materials and Oil, including but not limited to ionization smoke detectors, ballasts, mercury bulb thermostats, used oil, contaminated filters, contaminated absorbents, or refrigerants, that at any time are present at the Work site in

accordance with all applicable federal, state, and local laws, regulations, and ordinances. Even if an appropriate change order has been entered into pursuant to this Article, SIEMENS shall continue to have the right to stop the Work until the job site is free from Hazardous Materials. In such event, SIEMENS will receive an equitable extension of time to complete the Work, and compensation for delays caused by Hazardous Materials remediation. In no event shall SIEMENS be required or construed to take title, ownership or responsibility for such Oil or Hazardous Materials. Client shall sign any required waste manifests in conformance with all government regulations, listing Client as the generator of the waste.

**7.3** Client warrants that, prior to the execution of this Agreement, it shall notify SIEMENS in writing of any and all Hazardous Materials which to Client's best knowledge are present, potentially present or likely to become present at the Work site and shall provide a copy of any Work site safety policies, including but not limited to lock-out and tag procedures, laboratory procedures, chemical hygiene plan, MSDSs or other items covered or required to be disclosed or maintained by federal, state, or local laws, regulations or ordinances.

**7.4** For separate consideration of \$10 and other good and valuable consideration, the receipt and adequacy of which are hereby acknowledge, Client shall indemnify, defend and hold SIEMENS harmless from and against any damages, losses, costs, liabilities or expenses (including attorneys' fees) arising out of any Oil or Hazardous Materials or from Client's breach of, or failure to perform its obligations under this Article.

**Article 8: Import / Export Indemnity**

8.1 Client acknowledges that SIEMENS is required to comply with applicable export laws and regulations relating to the sale, exportation, transfer, assignment, disposal and usage of the *Work or Equipment or Services* provided under the Contract, including any export license requirements. Client agrees that such *Work or Equipment or Services* shall not at any time directly or indirectly be used, exported, sold, transferred, assigned or otherwise disposed of in a manner which will result in non-compliance with such applicable export laws and regulations. It shall be a condition of the continuing performance by SIEMENS of its obligations hereunder that compliance with such export laws and regulations be maintained at all times. CLIENT AGREES TO INDEMNIFY AND HOLD SIEMENS HARMLESS FROM ANY AND ALL COSTS, LIABILITIES, PENALTIES, SANCTIONS AND FINES RELATED TO NON-COMPLIANCE WITH APPLICABLE EXPORT LAWS AND REGULATIONS.

The following Articles and Tables are hereby included and made part of this Exhibit D:

**Article 1: Summary of Articles**

- Article 1      Summary of Articles
- Article 2      Donnely Circle / Yolano Village Solar Production Methodology
- Article 3      El Rio Villa Solar Production Methodology
- Article 4      Riverbend Solar Proudction Methodology
- Article 5      Rate Schedule Summary

**Table 1.1 – Total Estimated Savings / Generation (Units)**

Measure	Electric Energy Produced (kWh)	Estimated \$ Generation Value
Donnely Circle / Yolano Village Solar	550,190	\$109,922
El Rio Villa Solar	416,352	\$83,183
Riverbend I Solar	129,412	\$25,855
Total	1,101,384	\$218,960

This Agreement does not include a savings / generation guarantee. The savings set forth in Table 1.1 are estimates only. The assumptions used for these calculations are set forth below.

This Exhibit comprising 3 pages is attached to and made a part of the Agreement between SIEMENS and the CLIENT.

**CLIENT:**            **Yolo County Housing Authority (YCHA)**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**SIEMENS:**        **Siemens Industry, Inc.**

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

## **Article 2: Donnely Circle/Yolano Village Solar Production Methodology**

2.1 Solar production is estimated using PVsyst V6.52 software.

2.2 Key assumptions used in model

- Azimuth for Array = 0°
- No shading assumed
- Tilt for all arrays = 10°
- Yearly soiling loss factor = 3%
- Annual Production degradation = 0.5%
- Meteo Data based on Sacramento Metropolitan AP
- PV Panels = Renesola JC320M-24/Abs
- PV Inverters = SMA Sunny Tripower Core1

A copy of the simulation results is included at the end of this Exhibit as Appendix 1.

## **Article 3: El Rio Villa Solar Production Methodology**

3.1 Solar production is estimated using PVsyst V6.52 software.

3.2 Key assumptions used in model

- Azimuth for Array = 40°
- No shading assumed
- Tilt for all arrays = 10°
- Yearly soiling loss factor = 3%
- Annual Production degradation = 0.5%
- Meteo Data based on Sacramento Metropolitan AP
- PV Panels = Renesola JC320M-24/Abs
- PV Inverters = SMA Sunny Tripower Core1

A copy of the simulation results is included at the end of this Exhibit as Appendix 1.

## Article 4: Riverbend I Solar Production Methodology

4.1 Solar production is estimated using PVsyst V6.52 software.

4.2 Key assumptions used in model

- Azimuth for Array = 7°
- No shading assumed
- Tilt for all arrays = 10°
- Yearly soiling loss factor = 3%
- Annual Production degradation = 0.5%
- Meteo Data based on Sacramento Metropolitan AP
- PV Panels = Renesola JC320M-24/Abs
- PV Inverters = Fronius Symo 15.0-3 / 220

A copy of the simulation results is included at the end of this Exhibit as Appendix 1.

## Article 5: Rate Schedule Summary

Table 5.1 below shows the utility rate for electricity.

**Table 5.1: Utility Rates**

Site	Electric Utility Rate
Donnelly Circle / Yolano Village	\$0.19979
El Rio Villa	\$0.19979
Riverbend	\$0.19979

- The electric rates for housing are based on current published PG&E residential rate (E-1) as of March 1, 2017.

## Grid-Connected System: Simulation parameters

<b>Project :</b>	<b>Donnely</b>			
<b>Geographical Site</b>	<b>Sacramento Metropolitan Ap</b>	Country	<b>United States</b>	
<b>Situation</b>	Latitude	38.70° N	Longitude	121.58° W
Time defined as	Legal Time	Time zone UT-8	Altitude	7 m
	Albedo	0.20		
<b>Meteo data:</b>	<b>Sacramento Metropolitan Ap</b>			

<b>Simulation variant :</b>	<b>Donnely 0° Azimuth</b>
	Simulation date 26/04/17 14h29

### Simulation parameters

<b>Collector Plane Orientation</b>	Tilt	10°	Azimuth	0°	
<b>Models used</b>	Transposition	Perez	Diffuse	Imported	
<b>Horizon</b>	Free Horizon				
<b>Near Shadings</b>	No Shadings				
<b>PV Arrays Characteristics (2 kinds of array defined)</b>					
<b>PV module</b>	Si-poly	Model	<b>JC320M-24/Abs</b>		
Custom parameters definition	Manufacturer	Renesola			
<b>Sub-array "Sub-array #1"</b>					
Number of PV modules	In series	17 modules	In parallel	46 strings	
Total number of PV modules	Nb. modules	782	Unit Nom. Power	320 Wp	
Array global power	Nominal (STC)	<b>250 kWp</b>	At operating cond.	225 kWp (50°C)	
Array operating characteristics (50°C)	U mpp	571 V	I mpp	394 A	
<b>Sub-array "Sub-array #2"</b>					
Number of PV modules	In series	17 modules	In parallel	15 strings	
Total number of PV modules	Nb. modules	255	Unit Nom. Power	320 Wp	
Array global power	Nominal (STC)	<b>81.6 kWp</b>	At operating cond.	73.3 kWp (50°C)	
Array operating characteristics (50°C)	U mpp	571 V	I mpp	128 A	
<b>Total</b>	Arrays global power	Nominal (STC)	<b>332 kWp</b>	Total	1037 modules
		Module area	<b>2012 m²</b>		
<b>Inverter</b>					
Custom parameters definition	Model	<b>!Sunny Tripower Core1 Prelim 12.8.16</b>			
Characteristics	Manufacturer	SMA			
	Operating Voltage	150-1000 V	Unit Nom. Power	50 kWac	
<b>Sub-array "Sub-array #1"</b>	Nb. of inverters	25 * MPPT 17 %	Total Power	208 kWac	
<b>Sub-array "Sub-array #2"</b>	Nb. of inverters	8 * MPPT 17 %	Total Power	67 kWac	
<b>Total</b>	Nb. of inverters	6	Total Power	274.9 kWac	
<b>PV Array loss factors</b>					
Array Soiling Losses			Loss Fraction	3.0 %	
Thermal Loss factor	Uc (const)	29.0 W/m²K	Uv (wind)	0.0 W/m²K / m/s	
Wiring Ohmic Loss	Array#1	24 mOhm	Loss Fraction	1.5 % at STC	
	Array#2	74 mOhm	Loss Fraction	1.5 % at STC	
	Global		Loss Fraction	1.5 % at STC	

### Grid-Connected System: Simulation parameters (continued)

Module Quality Loss  
Module Mismatch Losses

Loss Fraction -0.5 %  
Loss Fraction 1.0 % at MPP

Incidence effect, user defined profile

0°	20°	40°	60°	70°	75°	80°	85°	90°
1.00	1.00	1.00	0.99	0.93	0.88	0.80	0.69	0.52

**User's needs :**

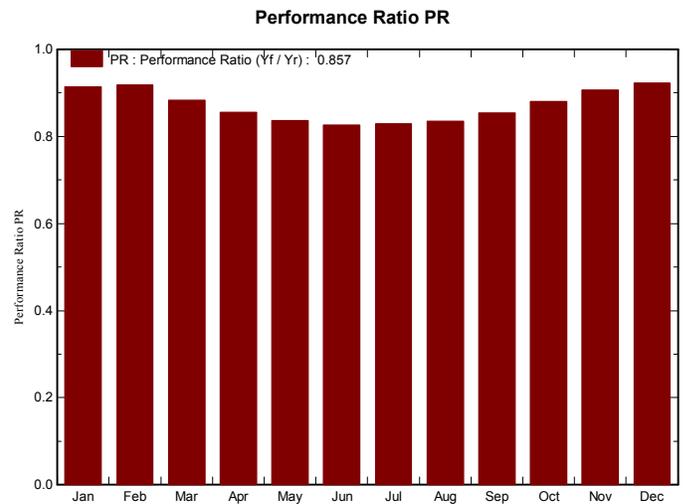
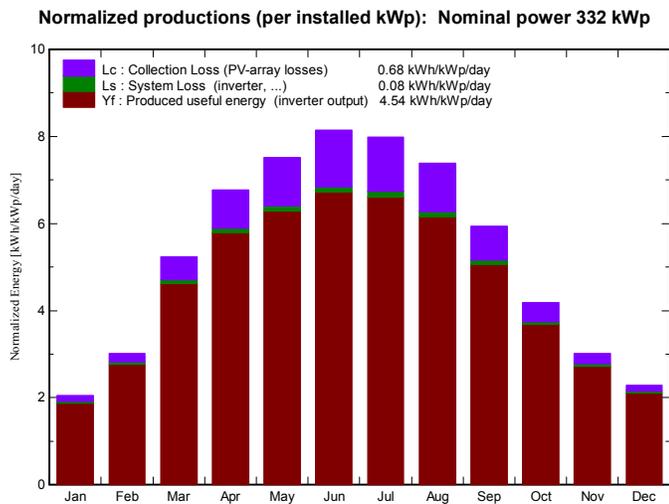
Unlimited load (grid)

## Grid-Connected System: Main results

**Project :** Donnely  
**Simulation variant :** Donnely 0° Azimuth

<b>Main system parameters</b>		<b>System type</b>	<b>Grid-Connected</b>	
PV Field Orientation		tilt	10°	azimuth 0°
PV modules		Model	JC320M-24/Abs	Pnom 320 Wp
PV Array		Nb. of modules	1037	Pnom total <b>332 kWp</b>
Inverter		!Sunny Tripower Core1 Prelim 12.8.16		Pnom 50.0 kW ac
Inverter pack		Nb. of units	5.5	Pnom total <b>275 kW ac</b>
User's needs		Unlimited load (grid)		

**Main simulation results**  
 System Production **Produced Energy 550190 kW/year** Specific prod. 1658 kWh/kWp/year  
 Performance Ratio PR 85.66 %



### Donnely 0° Azimuth Balances and main results

	GlobHor kWh/m <sup>2</sup>	T Amb °C	GlobInc kWh/m <sup>2</sup>	GlobEff kWh/m <sup>2</sup>	EArray MWh	E_Grid MWh	EffArrR %	EffSysR %
<b>January</b>	53.8	7.65	63.7	60.6	19.68	19.32	15.35	15.07
<b>February</b>	73.8	8.54	84.4	80.4	26.18	25.72	15.42	15.15
<b>March</b>	146.7	13.78	162.2	155.4	48.40	47.53	14.83	14.56
<b>April</b>	191.8	16.30	203.0	194.3	58.66	57.60	14.36	14.10
<b>May</b>	227.7	18.23	232.9	223.3	65.82	64.61	14.04	13.79
<b>June</b>	242.8	22.99	244.1	234.1	68.18	66.90	13.88	13.62
<b>July</b>	244.0	23.75	247.3	237.2	69.28	67.97	13.92	13.66
<b>August</b>	218.5	23.10	228.7	219.3	64.55	63.34	14.02	13.76
<b>September</b>	162.5	21.08	178.1	170.7	51.37	50.43	14.34	14.07
<b>October</b>	113.2	15.82	129.8	124.1	38.59	37.92	14.77	14.52
<b>November</b>	75.4	11.42	90.2	86.1	27.63	27.15	15.21	14.95
<b>December</b>	58.3	7.71	71.0	67.4	22.08	21.70	15.47	15.20
<b>Year</b>	1808.4	15.90	1935.5	1852.9	560.40	550.19	14.39	14.13

Legends:

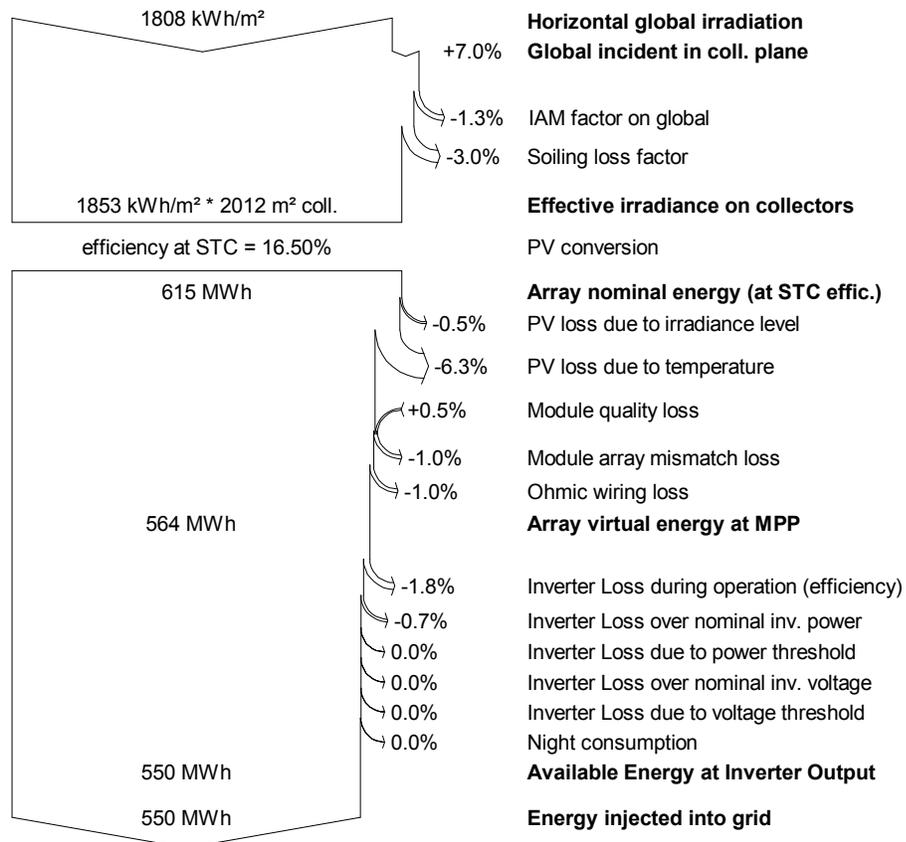
GlobHor	Horizontal global irradiation	EArray	Effective energy at the output of the array
T Amb	Ambient Temperature	E_Grid	Energy injected into grid
GlobInc	Global incident in coll. plane	EffArrR	Effic. Eout array / rough area
GlobEff	Effective Global, corr. for IAM and shadings	EffSysR	Effic. Eout system / rough area

## Grid-Connected System: Loss diagram

**Project :** Donnely  
**Simulation variant :** Donnely 0° Azimuth

<b>Main system parameters</b>	System type	<b>Grid-Connected</b>		
PV Field Orientation	tilt	10°	azimuth	0°
PV modules	Model	JC320M-24/Abs	Pnom	320 Wp
PV Array	Nb. of modules	1037	Pnom total	<b>332 kWp</b>
Inverter	!Sunny Tripower Core1 Prelim 12.8.16		Pnom	50.0 kW ac
Inverter pack	Nb. of units	5.5	Pnom total	<b>275 kW ac</b>
User's needs	Unlimited load (grid)			

### Loss diagram over the whole year



## Grid-Connected System: Simulation parameters

**Project :** **Riverbend**

**Geographical Site** **Sacramento Metropolitan Ap** Country **United States**

**Situation** Latitude 38.70° N Longitude 121.58° W  
 Time defined as Legal Time Time zone UT-8 Altitude 7 m  
 Albedo 0.20

**Meteo data:** **Sacramento Metropolitan Ap**

**Simulation variant :** **Riverbend**

Simulation date 26/04/17 11h12

### Simulation parameters

**Collector Plane Orientation** Tilt 10° Azimuth 7°

**Models used** Transposition Perez Diffuse Imported

**Horizon** Free Horizon

**Near Shadings** No Shadings

**PV Array Characteristics**

**PV module** Si-poly Model **JC320M-24/Abs**  
 Custom parameters definition Manufacturer Renesola

Number of PV modules In series 13 modules In parallel 19 strings

Total number of PV modules Nb. modules 247 Unit Nom. Power 320 Wp

Array global power Nominal (STC) **79.0 kWp** At operating cond. 71.0 kWp (50°C)

Array operating characteristics (50°C) U mpp 437 V I mpp 163 A

Total area Module area **479 m<sup>2</sup>**

**Inverter** Model **Symo 15.0-3 / 220**  
 Original PVsyst database Manufacturer Fronius USA

Characteristics Operating Voltage 325-850 V Unit Nom. Power 15.0 kWac

Inverter pack Nb. of inverters 5 units Total Power 75 kWac

**PV Array loss factors**

Array Soiling Losses Loss Fraction 3.0 %

Thermal Loss factor U<sub>c</sub> (const) 29.0 W/m<sup>2</sup>K U<sub>v</sub> (wind) 0.0 W/m<sup>2</sup>K / m/s

Wiring Ohmic Loss Global array res. 45 mOhm Loss Fraction 1.5 % at STC

Module Quality Loss Loss Fraction -0.5 %

Module Mismatch Losses Loss Fraction 1.0 % at MPP

Incidence effect, user defined profile

0°	20°	40°	60°	70°	75°	80°	85°	90°
1.00	1.00	1.00	0.99	0.93	0.88	0.80	0.69	0.52

**User's needs :** Unlimited load (grid)

## Grid-Connected System: Main results

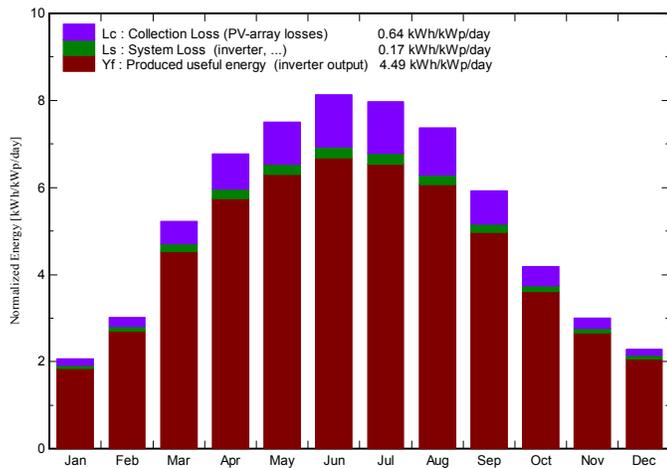
**Project :** Riverbend

**Simulation variant :** Riverbend

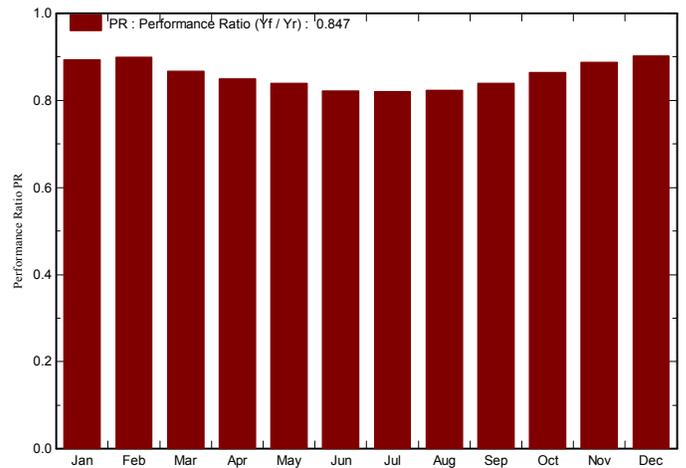
<b>Main system parameters</b>		<b>System type</b>	<b>Grid-Connected</b>	
PV Field Orientation		tilt	10°	azimuth 7°
PV modules		Model	JC320M-24/Abs	Pnom 320 Wp
PV Array		Nb. of modules	247	Pnom total <b>79.0 kWp</b>
Inverter		Model	Symo 15.0-3 / 220	Pnom 14.99 kW ac
Inverter pack		Nb. of units	5.0	Pnom total <b>75.0 kW ac</b>
User's needs		Unlimited load (grid)		

<b>Main simulation results</b>				
System Production	<b>Produced Energy</b>	<b>129.4 MWh/year</b>	Specific prod.	1637 kWh/kWp/year
	Performance Ratio PR	84.67 %		

**Normalized productions (per installed kWp): Nominal power 79.0 kWp**



**Performance Ratio PR**



### Riverbend Balances and main results

	GlobHor	T Amb	GlobInc	GlobEff	EArray	E_Grid	EffArrR	EffSysR
	kWh/m <sup>2</sup>	°C	kWh/m <sup>2</sup>	kWh/m <sup>2</sup>	MWh	MWh	%	%
<b>January</b>	53.8	7.65	63.8	60.7	4.70	4.50	15.35	14.72
<b>February</b>	73.8	8.54	84.2	80.3	6.23	5.98	15.42	14.82
<b>March</b>	146.7	13.78	161.9	155.1	11.52	11.10	14.85	14.31
<b>April</b>	191.8	16.30	202.9	194.1	14.13	13.62	14.53	14.01
<b>May</b>	227.7	18.23	232.6	223.1	16.01	15.43	14.36	13.84
<b>June</b>	242.8	22.99	244.0	233.9	16.44	15.85	14.06	13.56
<b>July</b>	244.0	23.75	247.2	237.1	16.61	16.02	14.02	13.52
<b>August</b>	218.5	23.10	228.5	219.1	15.42	14.88	14.08	13.59
<b>September</b>	162.5	21.08	177.8	170.4	12.23	11.79	14.34	13.83
<b>October</b>	113.2	15.82	129.7	124.0	9.18	8.85	14.77	14.24
<b>November</b>	75.4	11.42	90.1	85.9	6.57	6.32	15.21	14.64
<b>December</b>	58.3	7.71	71.0	67.4	5.26	5.06	15.46	14.87
<b>Year</b>	1808.4	15.90	1933.8	1851.3	134.29	129.41	14.49	13.96

Legends:

GlobHor	Horizontal global irradiation	EArray	Effective energy at the output of the array
T Amb	Ambient Temperature	E_Grid	Energy injected into grid
GlobInc	Global incident in coll. plane	EffArrR	Effic. Eout array / rough area
GlobEff	Effective Global, corr. for IAM and shadings	EffSysR	Effic. Eout system / rough area

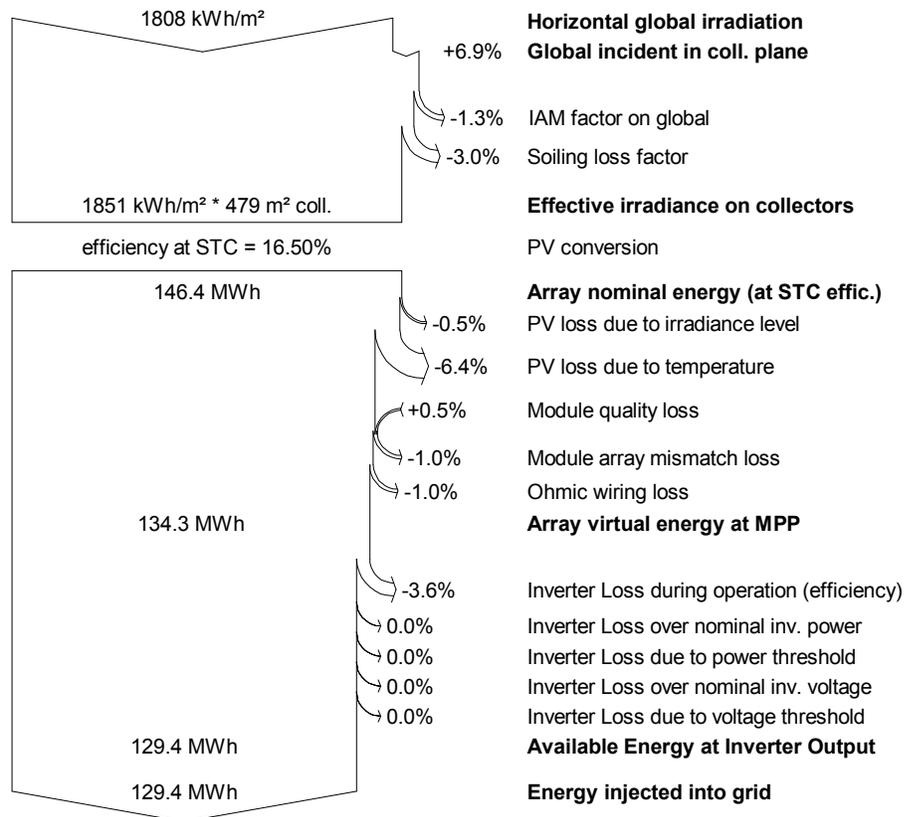
## Grid-Connected System: Loss diagram

**Project :** Riverbend

**Simulation variant :** Riverbend

<b>Main system parameters</b>	System type	<b>Grid-Connected</b>	
PV Field Orientation	tilt	10°	azimuth 7°
PV modules	Model	JC320M-24/Abs	Pnom 320 Wp
PV Array	Nb. of modules	247	Pnom total <b>79.0 kWp</b>
Inverter	Model	Symo 15.0-3 / 220	Pnom 14.99 kW ac
Inverter pack	Nb. of units	5.0	Pnom total <b>75.0 kW ac</b>
User's needs	Unlimited load (grid)		

### Loss diagram over the whole year



## Grid-Connected System: Simulation parameters

**Project :** **El Rio Villa**

**Geographical Site** **Sacramento Metropolitan Ap** **Country** **United States**

**Situation** Latitude 38.70° N Longitude 121.58° W  
Time defined as Legal Time Time zone UT-8 Altitude 7 m  
Albedo 0.20

**Meteo data:** **Sacramento Metropolitan Ap**

**Simulation variant :** **El Rio Villa 40° Azimuth**

Simulation date 26/04/17 14h42

### Simulation parameters

**Collector Plane Orientation** Tilt 10° Azimuth 40°

**Models used** Transposition Perez Diffuse Imported

**Horizon** Free Horizon

**Near Shadings** No Shadings

### PV Array Characteristics

**PV module** Si-poly Model **JC320M-24/Abs**

Custom parameters definition Manufacturer Renesola

Number of PV modules In series 17 modules In parallel 47 strings

Total number of PV modules Nb. modules 799 Unit Nom. Power 320 Wp

Array global power Nominal (STC) **256 kWp** At operating cond. 230 kWp (50°C)

Array operating characteristics (50°C) U mpp 571 V I mpp 402 A

Total area Module area **1550 m<sup>2</sup>**

### Inverter

Custom parameters definition Model **!Sunny Tripower Core1 Prelim 12.8.16**

Characteristics Manufacturer SMA

Inverter pack Operating Voltage 150-1000 V Unit Nom. Power 50 kWac

Nb. of inverters 25 \* MPPT 17 % Total Power 208 kWac

### PV Array loss factors

Array Soiling Losses Loss Fraction 3.0 %

Thermal Loss factor Uc (const) 29.0 W/m<sup>2</sup>K Uv (wind) 0.0 W/m<sup>2</sup>K / m/s

Wiring Ohmic Loss Global array res. 24 mOhm Loss Fraction 1.5 % at STC

Module Quality Loss Loss Fraction -0.5 %

Module Mismatch Losses Loss Fraction 1.0 % at MPP

Incidence effect, user defined profile

0°	20°	40°	60°	70°	75°	80°	85°	90°
1.00	1.00	1.00	0.99	0.93	0.88	0.80	0.69	0.52

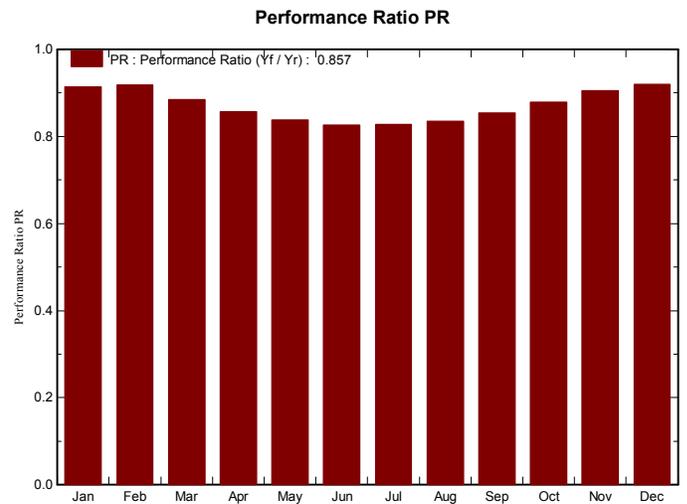
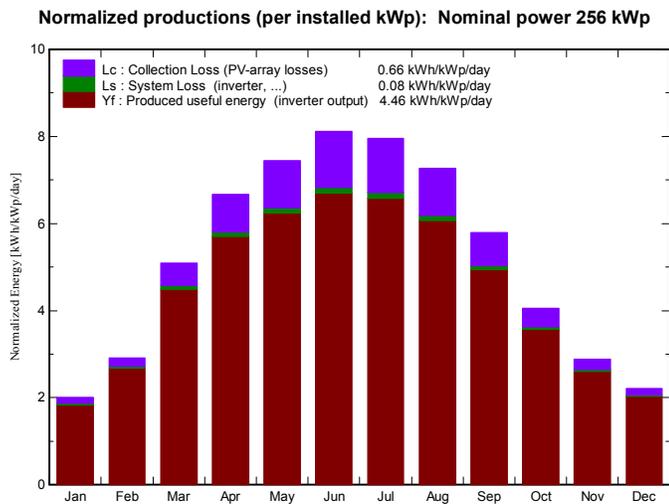
**User's needs :** **Unlimited load (grid)**

## Grid-Connected System: Main results

**Project :** EI Rio Villa  
**Simulation variant :** EI Rio Villa 40° Azimuth

<b>Main system parameters</b>	System type	<b>Grid-Connected</b>		
PV Field Orientation	tilt	10°	azimuth	40°
PV modules	Model	JC320M-24/Abs	Pnom	320 Wp
PV Array	Nb. of modules	799	Pnom total	<b>256 kWp</b>
Inverter	!Sunny Tripower Core1 Prelim 12.8.16		Pnom	50.0 kW ac
Inverter pack	Nb. of units	4.2	Pnom total	<b>208 kW ac</b>
User's needs	Unlimited load (grid)			

**Main simulation results**  
 System Production **Produced Energy 416352 kWh/year** Specific prod. 1628 kWh/kWp/year  
 Performance Ratio PR 85.66 %



### EI Rio Villa 40° Azimuth Balances and main results

	GlobHor	T Amb	GlobInc	GlobEff	EArray	E_Grid	EffArrR	EffSysR
	kWh/m <sup>2</sup>	°C	kWh/m <sup>2</sup>	kWh/m <sup>2</sup>	kWh	kWh	%	%
<b>January</b>	53.8	7.65	62.3	59.1	14800	14534	15.33	15.06
<b>February</b>	73.8	8.54	81.5	77.6	19463	19126	15.40	15.13
<b>March</b>	146.7	13.78	157.6	150.9	36264	35615	14.84	14.58
<b>April</b>	191.8	16.30	199.9	191.3	44581	43774	14.39	14.13
<b>May</b>	227.7	18.23	230.8	221.4	50368	49441	14.08	13.82
<b>June</b>	242.8	22.99	243.2	233.3	52370	51379	13.89	13.63
<b>July</b>	244.0	23.75	246.3	236.3	53177	52165	13.92	13.66
<b>August</b>	218.5	23.10	225.2	215.9	48989	48063	14.03	13.76
<b>September</b>	162.5	21.08	173.6	166.4	38578	37869	14.33	14.07
<b>October</b>	113.2	15.82	125.7	120.1	28774	28269	14.76	14.50
<b>November</b>	75.4	11.42	86.4	82.3	20335	19988	15.18	14.92
<b>December</b>	58.3	7.71	68.6	65.0	16407	16128	15.44	15.18
<b>Year</b>	1808.4	15.90	1901.1	1819.6	424106	416352	14.39	14.13

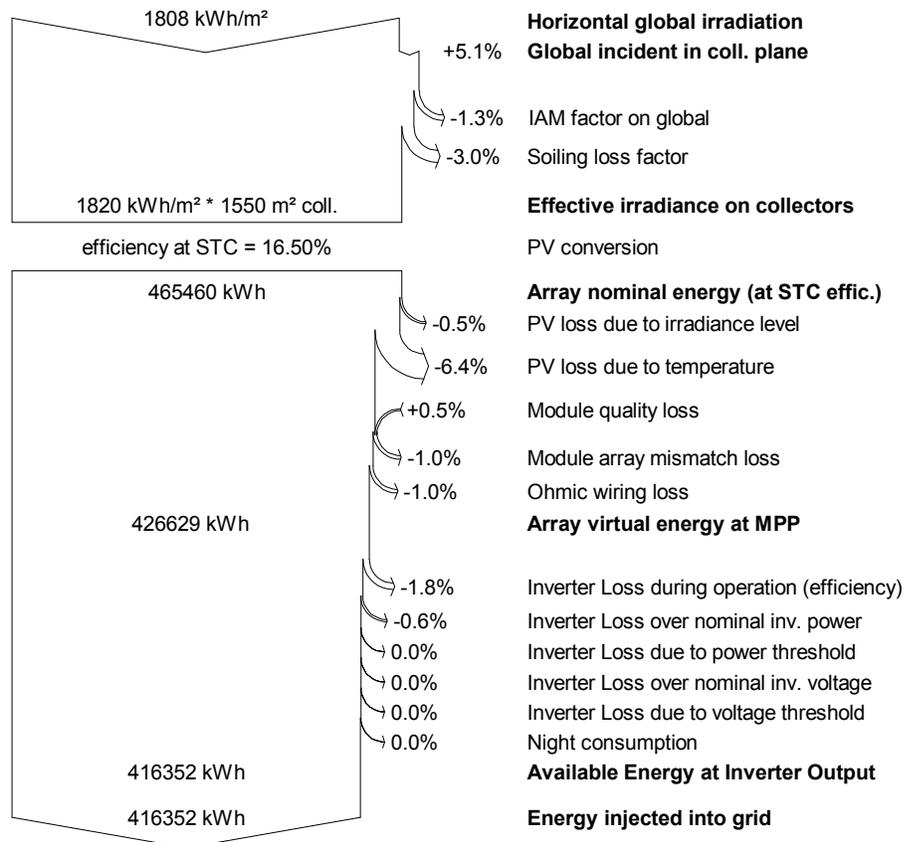
Legends:	GlobHor	Horizontal global irradiation	EArray	Effective energy at the output of the array
	T Amb	Ambient Temperature	E_Grid	Energy injected into grid
	GlobInc	Global incident in coll. plane	EffArrR	Effic. Eout array / rough area
	GlobEff	Effective Global, corr. for IAM and shadings	EffSysR	Effic. Eout system / rough area

## Grid-Connected System: Loss diagram

**Project :** El Rio Villa  
**Simulation variant :** El Rio Villa 40° Azimuth

<b>Main system parameters</b>	System type	<b>Grid-Connected</b>		
PV Field Orientation	tilt	10°	azimuth	40°
PV modules	Model	JC320M-24/Abs	Pnom	320 Wp
PV Array	Nb. of modules	799	Pnom total	<b>256 kWp</b>
Inverter	!Sunny Tripower Core1 Prelim 12.8.16		Pnom	50.0 kW ac
Inverter pack	Nb. of units	4.2	Pnom total	<b>208 kW ac</b>
User's needs	Unlimited load (grid)			

### Loss diagram over the whole year





May 9, 2017

Mr. Jim Gillette  
Executive Director  
Housing Authority of the County of Yolo  
147 W. Main Street  
Woodland, CA 95695

Via Email: [jgillette@ych.ca.gov](mailto:jgillette@ych.ca.gov)

RE: Request for Proposal – Lease Purchase Financing (the “RFP”)

Dear Mr. Gillette,

PNC Equipment Finance, LLC for itself, its successors and assigns, is pleased to submit this tax-exempt Lease Purchase Agreement Proposal (the “Proposal”) to Housing Authority of the County of Yolo for the purchase, acquisition and installation of a Solar Array (further described below). Our Proposal is as follows:

- LESSEE:** Housing Authority of the County of Yolo
- LESSOR:** PNC Equipment Finance, LLC
- VENDOR:** Siemens Industry, Inc.
- TYPE OF FINANCING:** Tax-exempt Lease Purchase Agreement (the “Agreement”) with \$1.00 buyout option at end of lease term. Said Agreement shall be a net lease arrangement whereby Lessee is responsible for all costs of operation, maintenance, insurance and taxes.
- BANK QUALIFICATION OPTION:** This Proposal assumes that the Lessee will be issuing less than \$10 million in tax-exempt debt during calendar year 2017. Furthermore, it is assumed that the Lessee will designate this issue as a qualified tax-exempt obligation pursuant to Section 265(b)(3) of the Internal Revenue Code of 1986, as amended (the “Code”). A portion of each Lease Payment allocated as “interest” will be excludable from the gross income for federal income tax purposes pursuant to Section 103(a) of the Code.
- TYPE OF EQUIPMENT/PROJECT:** Ground Mounted Solar Arrays  
All prices, terms, conditions and selection are solely by Lessee.
- PROJECT AMOUNT:** \$2,850,000.00
- FINANCED AMOUNT:** \$2,850,000.00

<b>PAYMENT MODE/FREQUENCY:</b>	Monthly in Arrears <i>(First payment due One (1) month after a Twelve (12) month construction period, this payment is anticipated to be from the MASH Grant in the approximate amount of \$633,683.00)</i>
<b>LEASE TERM:</b>	Fifteen (15) Years plus Twelve (12) months construction.
<b>LEASE RATE:</b>	3.180%
<b>LEASE PAYMENTS:</b>	See Attached Amortization Schedule
<b>ESCROW FUNDING OPTION:</b>	At lease closing, Lessor shall fund the entire Financed Amount into an escrow account from which disbursements will be made to the existing Lessor and to equipment provider(s) as directed. Escrow agent will either be Lessor or third-party provider selected by Lessor and approved by Lessee. All escrow earnings will be for the benefit of Lessee. A set-up fee for Lessor's escrow arrangement will be \$250.00, due at lease closing.
<b>INSURANCE:</b>	The Lessee shall furnish confirmation of all risk physical damage insurance coverage for the full cost of the property. In addition, Lessee shall provide \$2 million combined single limit property damage and bodily injury insurance covering the property. Lessor shall be named as loss payee and additional insured on such coverage.
<b>INDEXED FINANCING RATE:</b>	<b>After May 31, 2017</b> , Lessor reserves the right to adjust the Lease Rate to market conditions prior to documentation and funding. The Lease Rates offered herein shall be indexed to the 10-year interest rate swap as published at <a href="https://www.theice.com/marketdata/reports/180">https://www.theice.com/marketdata/reports/180</a> /US Rates 1100) ("ICE"). On May 4, 2017, the ICE 10-year interest rate swap is 2.309%. The lease rate used to establish the periodic lease payments shall be adjusted, up or down, by the change in the interest rate swap times 0.65 and then added or subtracted to the base Lease Rate indicated herein to determine the lease rate for the lease schedule, three business days prior to lease funding.
<b>AUTHORIZED SIGNORS:</b>	The Lessee's governing board shall provide Lessor with its resolution or ordinance authorizing this Agreement and shall designate the individual(s) to execute the Agreement used therein.
<b>LEGAL OPINION:</b>	The Lessee's counsel shall furnish Lessor with an opinion covering this Agreement. This opinion shall be in a form and substance satisfactory to Lessor at Lessee's cost.
<b>TAX OPINION:</b>	The Lessee's bond counsel shall furnish Lessor with an opinion covering this Agreement. This opinion shall be in a form and substance satisfactory to Lessor at Lessee's cost.
<b>PERFORMANCE CONTRACT:</b>	The Lessee shall furnish a copy of the executed Performance Contract from the Vendor prior to funding.

- SAVINGS GUARANTEE:** Vendor shall provide a copy of the Savings Guarantee to Lessor prior to funding.
- PERFORMANCE AND PAYMENT BOND:** Vendor shall provide a Performance and Payment Bond (the "Bond") listing Lessor as dual obligee prior to lease funding.
- LEGAL PROPERTY DESCRIPTIONS:** Lessee will provide Lessor with Legal Property Descriptions (metes and bounds) of all properties in which the Project will be installed.
- HUD APPROVAL:** Lessor requires evidence of HUD approval for the proposed Energy Conservation Measures, if required. Lessor will cooperate with Lessee and HUD to obtain the HUD approval for the project and financing.
- HUD SECTION 30 APPROVAL:** Lessor requires evidence of the HUD Section 30 approval, if required, prior to closing.
- LEGAL TITLE:** Legal title to the equipment during the lease term shall vest in the Lessee, with Lessor perfecting a first security interest through uniform commercial code filing or any other such instruments as may be required by law. Upon performance of the terms and conditions of the Agreement, the Lessee shall have the option to purchase all equipment for \$1.00.
- Fixture filings related to the installed equipment will be required to close. Lessee will provide legal descriptions of the properties included in the project.***
- DOCUMENTATION:** Lessor shall provide the Agreement.
- OUTSIDE COUNSEL FEE:** \$1,900.00
- PREPAYMENT OPTION:** So long as Lessee is not in default of the Agreement, Lessee shall have the option of paying off this transaction according to the Termination Values listed on the Amortization Schedules as provided in this Proposal. Partial prepayments will not be permitted under this Agreement.
- PROPOSAL EXPIRATION:** This Proposal will automatically expire at the end of business on July 15, 2017 unless accepted in writing by Lessee or extended in writing by Lessor. The Agreement must be fully executed and to the satisfaction of Lessor by such date. After May 31, 2017, Lessor reserves the right to adjust the interest rate according to the Indexed Financing Rate.

**This Proposal is subject to final credit approval by Lessor and approval of Agreement in Lessor's sole discretion. To render a credit decision, Lessee shall provide Lessor with its two most recently audited financial statements and a copy of its most current year's budget.**

Housing Authority of the County of Yolo  
Request for Proposal - Lease Purchase Financing  
May 9, 2017

I trust that you will find the contents of this Proposal to your satisfaction. If you should have any questions please contact me at 614-463-6580 or toll free at 866-215-9619 ext. 2.

Sincerely,  
PNC Equipment Finance, LLC

Alan Zuelke  
Vice President

ACCEPTED BY:           Housing Authority of the County of Yolo

By: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Compound Period: Monthly  
 Nominal Annual Rate: 3.180%

AMORTIZATION SCHEDULE - Normal Amortization, 360 Day Year

	Date	Payment	Interest	Principal	Balance	Termination Value
Loan	6/1/2017				2,850,000.00	No Call
1	6/1/2018	633,653.00	91,962.67	541,690.33	2,308,309.67	No Call
2	7/1/2018	13,191.00	6,117.02	7,073.98	2,301,235.69	No Call
3	8/1/2018	13,191.00	6,098.27	7,092.73	2,294,142.96	No Call
4	9/1/2018	13,191.00	6,079.48	7,111.52	2,287,031.44	No Call
5	10/1/2018	13,191.00	6,060.63	7,130.37	2,279,901.07	No Call
6	11/1/2018	13,191.00	6,041.74	7,149.26	2,272,751.81	No Call
7	12/1/2018	13,191.00	6,022.79	7,168.21	2,265,583.60	No Call
8	1/1/2019	13,191.00	6,003.80	7,187.20	2,258,396.40	No Call
9	2/1/2019	13,191.00	5,984.75	7,206.25	2,251,190.15	No Call
10	3/1/2019	13,191.00	5,965.65	7,225.35	2,243,964.80	No Call
11	4/1/2019	13,191.00	5,946.51	7,244.49	2,236,720.31	No Call
12	5/1/2019	13,191.00	5,927.31	7,263.69	2,229,456.62	No Call
13	6/1/2019	13,191.00	5,908.06	7,282.94	2,222,173.68	No Call
14	7/1/2019	13,643.00	5,888.76	7,754.24	2,214,419.44	No Call
15	8/1/2019	13,643.00	5,868.21	7,774.79	2,206,644.65	No Call
16	9/1/2019	13,643.00	5,847.61	7,795.39	2,198,849.26	No Call
17	10/1/2019	13,643.00	5,826.95	7,816.05	2,191,033.21	No Call
18	11/1/2019	13,643.00	5,806.24	7,836.76	2,183,196.45	No Call
19	12/1/2019	13,643.00	5,785.47	7,857.53	2,175,338.92	No Call
20	1/1/2020	13,643.00	5,764.65	7,878.35	2,167,460.57	No Call
21	2/1/2020	13,643.00	5,743.77	7,899.23	2,159,561.34	No Call
22	3/1/2020	13,643.00	5,722.84	7,920.16	2,151,641.18	No Call
23	4/1/2020	13,643.00	5,701.85	7,941.15	2,143,700.03	No Call
24	5/1/2020	13,643.00	5,680.81	7,962.19	2,135,737.84	No Call
25	6/1/2020	13,643.00	5,659.71	7,983.29	2,127,754.55	2,191,587.19
26	7/1/2020	14,108.00	5,638.55	8,469.45	2,119,285.10	2,182,863.65
27	8/1/2020	14,108.00	5,616.11	8,491.89	2,110,793.21	2,174,117.01
28	9/1/2020	14,108.00	5,593.60	8,514.40	2,102,278.81	2,165,347.17
29	10/1/2020	14,108.00	5,571.04	8,536.96	2,093,741.85	2,156,554.11
30	11/1/2020	14,108.00	5,548.42	8,559.58	2,085,182.27	2,147,737.74
31	12/1/2020	14,108.00	5,525.73	8,582.27	2,076,600.00	2,138,898.00
32	1/1/2021	14,108.00	5,502.99	8,605.01	2,067,994.99	2,130,034.84
33	2/1/2021	14,108.00	5,480.19	8,627.81	2,059,367.18	2,121,148.20
34	3/1/2021	14,108.00	5,457.32	8,650.68	2,050,716.50	2,112,238.00
35	4/1/2021	14,108.00	5,434.40	8,673.60	2,042,042.90	2,103,304.19
36	5/1/2021	14,108.00	5,411.41	8,696.59	2,033,346.31	2,094,346.70
37	6/1/2021	14,108.00	5,388.37	8,719.63	2,024,626.68	2,085,365.48
38	7/1/2021	14,586.00	5,365.26	9,220.74	2,015,405.94	2,075,868.12
39	8/1/2021	14,586.00	5,340.83	9,245.17	2,006,160.77	2,066,345.59
40	9/1/2021	14,586.00	5,316.33	9,269.67	1,996,891.10	2,056,797.83
41	10/1/2021	14,586.00	5,291.76	9,294.24	1,987,596.86	2,047,224.77
42	11/1/2021	14,586.00	5,267.13	9,318.87	1,978,277.99	2,037,626.33
43	12/1/2021	14,586.00	5,242.44	9,343.56	1,968,934.43	2,028,002.46
44	1/1/2022	14,586.00	5,217.68	9,368.32	1,959,566.11	2,018,353.09

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45	2/1/2022	14,586.00	5,192.85	9,393.15	1,950,172.96	2,008,678.15
46	3/1/2022	14,586.00	5,167.96	9,418.04	1,940,754.92	1,998,977.57
47	4/1/2022	14,586.00	5,143.00	9,443.00	1,931,311.92	1,989,251.28
48	5/1/2022	14,586.00	5,117.98	9,468.02	1,921,843.90	1,979,499.22
49	6/1/2022	14,586.00	5,092.89	9,493.11	1,912,350.79	1,969,721.31
50	7/1/2022	15,078.00	5,067.73	10,010.27	1,902,340.52	1,959,410.74
51	8/1/2022	15,078.00	5,041.20	10,036.80	1,892,303.72	1,949,072.83
52	9/1/2022	15,078.00	5,014.60	10,063.40	1,882,240.32	1,938,707.53
53	10/1/2022	15,078.00	4,987.94	10,090.06	1,872,150.26	1,928,314.77
54	11/1/2022	15,078.00	4,961.20	10,116.80	1,862,033.46	1,917,894.46
55	12/1/2022	15,078.00	4,934.39	10,143.61	1,851,889.85	1,907,446.55
56	1/1/2023	15,078.00	4,907.51	10,170.49	1,841,719.36	1,896,970.94
57	2/1/2023	15,078.00	4,880.56	10,197.44	1,831,521.92	1,886,467.58
58	3/1/2023	15,078.00	4,853.53	10,224.47	1,821,297.45	1,875,936.37
59	4/1/2023	15,078.00	4,826.44	10,251.56	1,811,045.89	1,865,377.27
60	5/1/2023	15,078.00	4,799.27	10,278.73	1,800,767.16	1,854,790.17
61	6/1/2023	15,078.00	4,772.03	10,305.97	1,790,461.19	1,844,175.03
62	7/1/2023	15,585.00	4,744.72	10,840.28	1,779,620.91	1,833,009.54
63	8/1/2023	15,585.00	4,716.00	10,869.00	1,768,751.91	1,821,814.47
64	9/1/2023	15,585.00	4,687.19	10,897.81	1,757,854.10	1,810,589.72
65	10/1/2023	15,585.00	4,658.31	10,926.69	1,746,927.41	1,799,335.23
66	11/1/2023	15,585.00	4,629.36	10,955.64	1,735,971.77	1,788,050.92
67	12/1/2023	15,585.00	4,600.33	10,984.67	1,724,987.10	1,776,736.71
68	1/1/2024	15,585.00	4,571.22	11,013.78	1,713,973.32	1,765,392.52
69	2/1/2024	15,585.00	4,542.03	11,042.97	1,702,930.35	1,754,018.26
70	3/1/2024	15,585.00	4,512.77	11,072.23	1,691,858.12	1,742,613.86
71	4/1/2024	15,585.00	4,483.42	11,101.58	1,680,756.54	1,731,179.24
72	5/1/2024	15,585.00	4,454.00	11,131.00	1,669,625.54	1,719,714.31
73	6/1/2024	15,585.00	4,424.51	11,160.49	1,658,465.05	1,708,219.00
74	7/1/2024	16,107.00	4,394.93	11,712.07	1,646,752.98	1,696,155.57
75	8/1/2024	16,107.00	4,363.90	11,743.10	1,635,009.88	1,684,060.18
76	9/1/2024	16,107.00	4,332.78	11,774.22	1,623,235.66	1,671,932.73
77	10/1/2024	16,107.00	4,301.57	11,805.43	1,611,430.23	1,659,773.14
78	11/1/2024	16,107.00	4,270.29	11,836.71	1,599,593.52	1,647,581.33
79	12/1/2024	16,107.00	4,238.92	11,868.08	1,587,725.44	1,635,357.20
80	1/1/2025	16,107.00	4,207.47	11,899.53	1,575,825.91	1,623,100.69
81	2/1/2025	16,107.00	4,175.94	11,931.06	1,563,894.85	1,610,811.70
82	3/1/2025	16,107.00	4,144.32	11,962.68	1,551,932.17	1,598,490.14
83	4/1/2025	16,107.00	4,112.62	11,994.38	1,539,937.79	1,586,135.92
84	5/1/2025	16,107.00	4,080.84	12,026.16	1,527,911.63	1,573,748.98
85	6/1/2025	16,107.00	4,048.97	12,058.03	1,515,853.60	1,561,329.21
86	7/1/2025	16,644.00	4,017.01	12,626.99	1,503,226.61	1,548,323.41
87	8/1/2025	16,644.00	3,983.55	12,660.45	1,490,566.16	1,535,283.14
88	9/1/2025	16,644.00	3,950.00	12,694.00	1,477,872.16	1,522,208.32
89	10/1/2025	16,644.00	3,916.36	12,727.64	1,465,144.52	1,509,098.86
90	11/1/2025	16,644.00	3,882.63	12,761.37	1,452,383.15	1,495,954.64
91	12/1/2025	16,644.00	3,848.82	12,795.18	1,439,587.97	1,482,775.61
92	1/1/2026	16,644.00	3,814.91	12,829.09	1,426,758.88	1,469,561.65
93	2/1/2026	16,644.00	3,780.91	12,863.09	1,413,895.79	1,456,312.66
94	3/1/2026	16,644.00	3,746.82	12,897.18	1,400,998.61	1,443,028.57
95	4/1/2026	16,644.00	3,712.65	12,931.35	1,388,067.26	1,429,709.28
96	5/1/2026	16,644.00	3,678.38	12,965.62	1,375,101.64	1,416,354.69

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97	6/1/2026	16,644.00	3,644.02	12,999.98	1,362,101.66	1,402,964.71
98	7/1/2026	17,196.00	3,609.57	13,586.43	1,348,515.23	1,388,970.69
99	8/1/2026	17,196.00	3,573.57	13,622.43	1,334,892.80	1,374,939.58
100	9/1/2026	17,196.00	3,537.47	13,658.53	1,321,234.27	1,360,871.30
101	10/1/2026	17,196.00	3,501.27	13,694.73	1,307,539.54	1,346,765.73
102	11/1/2026	17,196.00	3,464.98	13,731.02	1,293,808.52	1,332,622.78
103	12/1/2026	17,196.00	3,428.59	13,767.41	1,280,041.11	1,318,442.34
104	1/1/2027	17,196.00	3,392.11	13,803.89	1,266,237.22	1,304,224.34
105	2/1/2027	17,196.00	3,355.53	13,840.47	1,252,396.75	1,289,968.65
106	3/1/2027	17,196.00	3,318.85	13,877.15	1,238,519.60	1,275,675.19
107	4/1/2027	17,196.00	3,282.08	13,913.92	1,224,605.68	1,261,343.85
108	5/1/2027	17,196.00	3,245.21	13,950.79	1,210,654.89	1,246,974.54
109	6/1/2027	17,196.00	3,208.24	13,987.76	1,196,667.13	1,232,567.14
110	7/1/2027	17,765.00	3,171.17	14,593.83	1,182,073.30	1,217,535.50
111	8/1/2027	17,765.00	3,132.49	14,632.51	1,167,440.79	1,202,464.01
112	9/1/2027	17,765.00	3,093.72	14,671.28	1,152,769.51	1,187,352.60
113	10/1/2027	17,765.00	3,054.84	14,710.16	1,138,059.35	1,172,201.13
114	11/1/2027	17,765.00	3,015.86	14,749.14	1,123,310.21	1,157,009.52
115	12/1/2027	17,765.00	2,976.77	14,788.23	1,108,521.98	1,141,777.64
116	1/1/2028	17,765.00	2,937.58	14,827.42	1,093,694.56	1,126,505.40
117	2/1/2028	17,765.00	2,898.29	14,866.71	1,078,827.85	1,111,192.69
118	3/1/2028	17,765.00	2,858.89	14,906.11	1,063,921.74	1,095,839.39
119	4/1/2028	17,765.00	2,819.39	14,945.61	1,048,976.13	1,080,445.41
120	5/1/2028	17,765.00	2,779.79	14,985.21	1,033,990.92	1,065,010.65
121	6/1/2028	17,765.00	2,740.08	15,024.92	1,018,966.00	1,049,534.98
122	7/1/2028	18,351.00	2,700.26	15,650.74	1,003,315.26	1,033,414.72
123	8/1/2028	18,351.00	2,658.79	15,692.21	987,623.05	1,017,251.74
124	9/1/2028	18,351.00	2,617.20	15,733.80	971,889.25	1,001,045.93
125	10/1/2028	18,351.00	2,575.51	15,775.49	956,113.76	984,797.17
126	11/1/2028	18,351.00	2,533.70	15,817.30	940,296.46	968,505.35
127	12/1/2028	18,351.00	2,491.79	15,859.21	924,437.25	952,170.37
128	1/1/2029	18,351.00	2,449.76	15,901.24	908,536.01	935,792.09
129	2/1/2029	18,351.00	2,407.62	15,943.38	892,592.63	919,370.41
130	3/1/2029	18,351.00	2,365.37	15,985.63	876,607.00	902,905.21
131	4/1/2029	18,351.00	2,323.01	16,027.99	860,579.01	886,396.38
132	5/1/2029	18,351.00	2,280.53	16,070.47	844,508.54	869,843.80
133	6/1/2029	18,351.00	2,237.95	16,113.05	828,395.49	853,247.35
134	7/1/2029	13,330.00	2,195.25	11,134.75	817,260.74	841,778.56
135	8/1/2029	13,330.00	2,165.74	11,164.26	806,096.48	830,279.37
136	9/1/2029	13,330.00	2,136.16	11,193.84	794,902.64	818,749.72
137	10/1/2029	13,330.00	2,106.49	11,223.51	783,679.13	807,189.50
138	11/1/2029	13,330.00	2,076.75	11,253.25	772,425.88	795,598.66
139	12/1/2029	13,330.00	2,046.93	11,283.07	761,142.81	783,977.09
140	1/1/2030	13,330.00	2,017.03	11,312.97	749,829.84	772,324.74
141	2/1/2030	13,330.00	1,987.05	11,342.95	738,486.89	760,641.50
142	3/1/2030	13,330.00	1,956.99	11,373.01	727,113.88	748,927.30
143	4/1/2030	13,330.00	1,926.85	11,403.15	715,710.73	737,182.05
144	5/1/2030	13,330.00	1,896.63	11,433.37	704,277.36	725,405.68
145	6/1/2030	13,330.00	1,866.34	11,463.66	692,813.70	713,598.11
146	7/1/2030	19,574.00	1,835.96	17,738.04	675,075.66	695,327.93
147	8/1/2030	19,574.00	1,788.95	17,785.05	657,290.61	677,009.33
148	9/1/2030	19,574.00	1,741.82	17,832.18	639,458.43	658,642.18

Housing Authority of the County of Yolo  
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149	10/1/2030	19,574.00	1,694.56	17,879.44	621,578.99	640,226.36
150	11/1/2030	19,574.00	1,647.18	17,926.82	603,652.17	621,761.74
151	12/1/2030	19,574.00	1,599.68	17,974.32	585,677.85	603,248.19
152	1/1/2031	19,574.00	1,552.05	18,021.95	567,655.90	584,685.58
153	2/1/2031	19,574.00	1,504.29	18,069.71	549,586.19	566,073.78
154	3/1/2031	19,574.00	1,456.40	18,117.60	531,468.59	547,412.65
155	4/1/2031	19,574.00	1,408.39	18,165.61	513,302.98	528,702.07
156	5/1/2031	19,574.00	1,360.25	18,213.75	495,089.23	509,941.91
157	6/1/2031	19,574.00	1,311.99	18,262.01	476,827.22	491,132.04
158	7/1/2031	20,212.00	1,263.59	18,948.41	457,878.81	471,615.17
159	8/1/2031	20,212.00	1,213.38	18,998.62	438,880.19	452,046.60
160	9/1/2031	20,212.00	1,163.03	19,048.97	419,831.22	432,426.16
161	10/1/2031	20,212.00	1,112.55	19,099.45	400,731.77	412,753.72
162	11/1/2031	20,212.00	1,061.94	19,150.06	381,581.71	393,029.16
163	12/1/2031	20,212.00	1,011.19	19,200.81	362,380.90	373,252.33
164	1/1/2032	20,212.00	960.31	19,251.69	343,129.21	353,423.09
165	2/1/2032	20,212.00	909.29	19,302.71	323,826.50	333,541.30
166	3/1/2032	20,212.00	858.14	19,353.86	304,472.64	313,606.82
167	4/1/2032	20,212.00	806.85	19,405.15	285,067.49	293,619.51
168	5/1/2032	20,212.00	755.43	19,456.57	265,610.92	273,579.25
169	6/1/2032	20,212.00	703.87	19,508.13	246,102.79	253,485.87
170	7/1/2032	20,863.53	652.17	20,211.36	225,891.43	232,668.17
171	8/1/2032	20,863.53	598.61	20,264.92	205,626.51	211,795.31
172	9/1/2032	20,863.53	544.91	20,318.62	185,307.89	190,867.13
173	10/1/2032	20,863.53	491.07	20,372.46	164,935.43	169,883.49
174	11/1/2032	20,863.53	437.08	20,426.45	144,508.98	148,844.25
175	12/1/2032	20,863.53	382.95	20,480.58	124,028.40	127,749.25
176	1/1/2033	20,863.53	328.68	20,534.85	103,493.55	106,598.36
177	2/1/2033	20,863.53	274.26	20,589.27	82,904.28	85,391.41
178	3/1/2033	20,863.53	219.70	20,643.83	62,260.45	64,128.26
179	4/1/2033	20,863.53	164.99	20,698.54	41,561.91	42,808.77
180	5/1/2033	20,863.53	110.14	20,753.39	20,808.52	21,432.78
181	6/1/2033	20,863.53	55.01	20,808.52	0.00	1.00
Grand Totals		3,588,455.36	738,455.36	2,850,000.00		

Yolo County Housing  
Yolo County, California

Meeting Date: May 24, 2017

To: County Counsel ✓  
Yolo County Housing ✓

12.

Review, Approve and Authorize Resolution for Energy Performance Contract (EPC) for Energy Improvements in the Public Housing portfolio with Siemens as the Authorized Energy Services Company (ESCO) (Baker, Ichtertz)

Minute Order No. 17-28: Approved recommended action by **Resolution No. 17-06**.

MOTION: Arnold. SECOND: Neu. AYES: Arnold, Johannessen, Neu, Vanderford, Wienecke-Friedman. ABSENT: Barajas, Thomson.



## ***Yolo County Housing***

**Lisa A. Baker, Chief Executive Officer**

147 W. Main Street      Woodland: (530) 662-5428  
WOODLAND, CA 95695      Sacramento: (916) 444-8982  
TTY: (800) 545-1833, ext. 626

**DATE:** May 24, 2017  
**TO:** YCH Housing Commission  
**FROM:** Lisa A. Baker, CEO  
**SUBJECT:** Review, Approve and Authorize Resolution for Energy Performance Contract for Energy Improvements in the Public Housing Portfolio with Siemens as the Authorized Energy Services Company (ESCO)

### **RECOMMENDED ACTIONS:**

That the Housing Commission:

- 1) Review and approve the Performance Contracting Agreement with Siemens Industry, Inc.; and
- 2) Review, Approve and Authorize the Resolution for the Energy Performance Contract and Authorize the Related Equipment Lease; and
- 3) Authorize the CEO to finalize the Energy Performance Contract and to Sign Related Agreements upon receipt of approval of the Performance Contracting Agreement from the United States Department of Housing and Urban Development.

### **BACKGROUND / DISCUSSION:**

In May 2010, the Board of Commissioners of Yolo County Housing authorized YCH staff to enter into a Memorandum of Understanding (MOU) with the Regional Housing Authority of Sutter and Nevada Counties (RHASNC) Butte County Housing (BCH) to procure an Energy Services Consultant to look at energy saving opportunities in the various housing portfolios.

Working together to provide quality affordable housing and community development services for all

A Request for Proposals was issued in February 2012, and interested Energy Service Companies (ESCO's) walked through a sampling of our properties in March 2012 to look for energy saving opportunities. The following ESCO's submitted written proposals on April 17, 2012:

- Pepco Energy Services, Inc.
- Johnson Controls, Inc.
- Siemens Industry, Inc.

YCH staff reviewed the proposals submitted by the ESCO's in April 2012 and interviews of the three ESCO's took place on May 31, 2012, at the Yolo County Housing Authority offices.

After the review of the proposals and the interviews that took place, all three Housing Authorities recommended Siemens Industry, Inc. as the selected ESCO. References for Siemens Industry, Inc. were solicited and received back from past customers. All references came back with very high marks. As a result, the Board of Commissioners of Yolo County Housing approved the selection of Siemens Industry, Inc. ("Siemens") as the Energy Services Company that will explore energy saving opportunities for the agency.

This will be an Energy Performance Contract, which means that YCH, upon approval by HUD, will be eligible to freeze its utility base subsidy for a period of years in order to enhance cash flow and take on additional improvements. HUD will continue to subsidize YCH for utilities at the higher rate under this contract. In addition, Siemens must guarantee that there will be sufficient energy savings and subsidy to pay for the improvements with no out of pocket expense to YCH.

#### **Performance Contracting Agreement:**

With energy costs rising and costs of energy efficiency upgrade materials (such as LED lighting) decreasing, Siemens has been able to produce a Project that makes significant upgrades to the energy infrastructure across YCH's Public Housing Portfolio where the energy savings will pay for the upgrades and support a Lease over a 20-year term. These upgrades and the related savings calculations are detailed in the attached Performance Contracting Agreement and related Exhibits.

The highlights are:

- LED Interior and Exterior Lighting upgrades
- Water conservation upgrades (low-flow toilets, showerheads, faucet aerators)
- Domestic Hot Water Heaters at Ridgecut Homes (Knights Landing)
- Comprehensive window replacement at El Rio Villa 2 (the windows in this site were not replaced with ARRA funds)

The Performance Contracting Agreement will be financed by YCH by way of a lease purchase agreement with security interest in the associated equipment only, in the approximate amount of \$1,627,882.

The funds to be borrowed by YCH are guaranteed by Siemens to be repaid from the guaranteed utility-cost savings, per the terms set forth within the Performance Contracting Agreement to be entered into between YCH and Siemens.

Attachments: Resolution

YOLO COUNTY HOUSING  
RESOLUTION NO. 17-\_\_\_\_\_

**Approval of Yolo County Housing (YCH) to borrow up to \$1,627,882 (plus potential financing fees) to finance a contract with Siemens Industry, Inc. to provide energy saving improvements to YCH properties.**

**Whereas**, Yolo County Housing (YCH) plans to execute a performance contracting agreement (hereinafter "Savings Contract") with Siemens Industry, Inc's Building Technologies Division (hereinafter "Siemens") upon receipt of the approval of the United States Department of Housing and Urban Development (hereinafter "HUD"), to provide an implement certain energy savings improvements to HAA properties in connection with Contract No: \_\_\_\_\_; and

**Whereas**, the Savings Contract will be financed by YCH by way of a lease purchase agreement with security interest in the associated equipment only, in the approximate amount of \$1,627,882.

**Whereas**, the funds to be borrowed by YCH are guaranteed by Siemens to be repaid from the guaranteed utility-cost savings by Siemens, per the terms set forth within the Savings Contract to be entered into between YCH and Siemens;

**Now, Therefore**, be resolved by the Housing Commission of the Housing Authority of the County of Yolo (Yolo County Housing), that its Chief Executive Officer and the other representatives designated by the Chief Executive Officer, are hereby authorized and empowered to execute such agreements, contracts, Savings Contract, and any other documents required to carry out and effectuate the financing and securing of said financing loan, provided the Chief Executive Officer has satisfactorily reviewed, negotiated, and is satisfied with the terms; and

After unanimous consensus of the Housing Commission, the foregoing Resolution is hereby unanimously approved and adopted by the Housing Commission of Yolo County Housing, at its regular meeting this 24<sup>th</sup> day of May, 2017.

**EFFECTIVE DATES:** This Resolution shall take effect from and after the date of its adoption.

**PASSED AND ADOPTED**, by the Housing Commission of the Housing Authority of the County of Yolo, State of California, this 24<sup>th</sup> day of May, 2017 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

\_\_\_\_\_  
Mark Johannessen, Chair  
Housing Commission of the  
Housing Authority of the County of Yolo  
Approved as to Form:

By \_\_\_\_\_  
Hope Welton, Agency Counsel

Attest:  
Julie Dachtler, Agency Clerk  
Housing Commission of the  
Housing Authority of the County of Yolo

By \_\_\_\_\_

Yolo County Housing  
Yolo County, California

Meeting Date: May 24, 2017

To: County Counsel ✓  
Yolo County Housing ✓

13.

Receive comments from CEO.

CEO Lisa Baker referred to the handout about recent activities. Under Finance she noted the 2016 audit finding eliminated the Interfund program finding and they now have a clean slate, which is big news. Under Management: moving to a new automated, on-demand human resources program, called BambooHR System; the Operational Area Emergency Operations Collaboration; Training and Homeless Roundtable and Housing Forum. Under Client Services she reported on Youth Leadership Training, Rec2Go Summer Partnership at Crosswood, Families Together Program at the West Sac Library, Shopping Carts for Winters seniors and disabled, and a collaboration with Yolo County Car Seat Safety Program to provide car seats to El Rio Villas residents who are pregnant or have children 0 to 3 years old. Under Operations she updated the Board about the Winters Water Well, and notification that the Housing Assistance is once again a national High Performing Program.

## Things going besides BUDGETS, BUDGETS, BUDGETS

### **Finance:**

No more audit finding! The 2015 audit finding is a successor finding to one that had been originally cited in the 2007 HUD review and in subsequent audits. As YCH improved its accounting and financial reporting, the scope and nature of the finding changed and the finding was updated each year. As of 2016, we have finally eliminated the Interfund program finding and have a clean slate.

We have achieved agreement with the State (HCD) to refinance the \$368,000+ Note through 1st Northern Bank and the State will allow the regulatory requirement to expire with the Note pay-off. This is due to the fact that YCH still has an affordability agreement on the property with New Hope and that YCH has a) voucher tenants in the property and b) the Commission has created the hold harmless internal subsidy program. Great news.

### **Management:**

Moving to automated, on demand human resources: BambooHR System - Recruitment, onboarding, HR management, and Performance Feedback System to provide easier access to HR information for staff and enhance overall HR management of the agency. Provides an improved image for the agency during recruitment and onboarding processes. Enhances self-service access to policies, benefit information, etc., for current staff and provides a platform for a more interactive performance feedback between staff and management.

Operational Area Emergency Operations Collaboration and Training: IEMC Training and OA Functional Exercise - Ten (10) staff from all areas of management, housing and facility operations and finance participated in one day of training in their assigned areas (Operations, Planning, Logistics, and Finance) and spent 2 days working through the functional exercise with injects being thrown out them as the "disaster" hit countywide. On the second day we went through the "hot wash" to determine what worked and where we needed improvement. Great experience working with our OES partners and our team. Received very positive feedback from the IEMC instructors for our staff's ability to deal effectively in a crisis, respond thoughtfully and proactively and most importantly AS A TEAM!

Homeless RoundTable: On May 18th, Steve Flores, HCV Inspector served on two panels during the Homeless RoundTable in West Sacramento. He shared information related working with landlord and tenant relations and how to work with your local housing authority. Management heard great things about Steven's insight and information from both panels.

Housing Forum: the CEO was invited to speak on a Housing panel with Sacramento Mayor Steinberg and Stockton Mayor Tubbs regarding housing at a forum hosted by the Milken Institute, Local Government Commission and Capital Public Radio. It was also broadcast on NPR. We received great response from those who attended. The session is available on the Capital Public Radio website.

***Client Services:***

Youth Services: Youth Leadership Training (AMP I): We are offering an 8 session Leadership training for youth ages 13-17 at Yolano/Donnelly. 8 youth are participating in the program. The youth who successfully complete the training will receive a \$50 stipend and the opportunity to serve as junior leaders of the summer activity program.

Partnership with Woodland: Rec2Go Summer Partnership (Crosswood): The City of Woodland Rec2Go van is scheduled to make visits at Crosswood and Yolano/Donnelly in June, July, and August.

West Sac Partnership with the Library: Families Together Program (AMP III): The Arthur Turner Library in West Sacramento will be offering their *Families Together* program at the Las Casitas CLC starting on May 31st. This program is for parents and children under age 5, and is designed to promote reading at home. In addition, we are using funds from Big Day of Giving to create a Reading Corner in the Las Casitas CLC.

Fantastic Community Support in Winters: Shopping Carts - Winters Middle school students in conjunction with their Activities Director "Gina Johnson" started a fundraiser (Coins for Carts), for the purpose of purchasing Portable Shopping Carts for residents at El Rio Villas in Winters. Students and other donors were able to raise over \$300.00 and purchased 15 shopping carts that were distributed to El Rio Villas residents who are seniors, disabled or have no transportation. According to Gina Johnson, the idea of purchasing these carts came from seeing people crossing over the I-505 overpass carrying their purchased goods.

Good example of County partnership in Unincorporated County: Baby Car Seats - The Yolo County Car Seat Safety Program reached to YCH with a donation of 15 car seats that they received from AAA. 10 car seats were distributed to El Rio Villas Residents who are pregnant or have children 0 to 3 years old. The residents who received these car seats had either a child who outgrown their car seat, had an expired or recalled car seat, or had no car seat at all.

Residents also received a 30 minute training on car seat safety to learn how to install their new car seat in their vehicle. (*residents did not necessarily have to own a vehicle to receive a car seat*)

### ***Operations***

Utility improvements: Winters Water Well set up is proceeding with a planned meeting with the contractor, engineer and Yolo County for Thursday at 10 a.m. If all goes as planned, the contractor will start to drill the test hole on Tuesday.

Housing Assistance just got notified that they are once again a national High Performing Program. Congratulations to the voucher program staff!

We had an overhead waterline break over the weekend. Needless to say, it was wet in our lobby and facilities offices come Monday morning. However, YCH's quick staff repaired the line, we are running fans and drying out. Once that is done, we'll see what we need to do re: the carpet and patch to the ceiling.