



City of San Leandro

Meeting Date: October 19, 2015

Minutes

File Number: 15-579

Agenda Section: CONSENT CALENDAR

Agenda Number: 8.C.

TO: City Council

FROM: Chris Zapata
City Manager

BY: Keith Cooke
Engineering & Transportation Director

FINANCE REVIEW: Not Applicable

TITLE: Highlights of the Facilities and Transportation Committee Meeting of
September 8, 2015

CITY OF SAN LEANDRO

CITY COUNCIL FACILITIES AND TRANSPORTATION COMMITTEE

September 8, 2015
4:00 p.m. - 6:00 p.m.

San Leandro City Hall
835 East 14th Street
San Leandro, California
Sister Cities Gallery

HIGHLIGHTS

1. CALL TO ORDER

1.A. Attendance

Committee Members: Mayor Pauline Cutter, Councilmember Corina Lopez,
Councilmember Ursula Reed

City Staff Present: Cynthia Battenberg, David Baum, Reh-Lin Chen, Keith Cooke,
Kirsten Foley, Jeff Kay, Austine Osakwe, Richard Pio Roda,
Debbie Pollart, Sandra Spagnoli, Luis Torres, Chris Zapata

Public Present: Jeff Bartel (Climatec), Bruce Dickinson (Sun Power), Lisa Jackson
(Pilot City), Tom Jackson (Climatec)

1.B. Announcements

2. DISCUSSION ITEMS

2.A. Discussion Regarding Energy and Water Efficiency Projects Update

Climatec shared an update on the findings of their feasibility assessment, discussed the City's energy consumption and distribution, presented potential cost cutting solutions, along with self-funding potential and requested the Committee's feedback. Sun Power is Solar Power subconsultant.

Climatec reviewed, per the requirements of the RFP: electric, water, heating/cooling; building automation system throughout the entire City; LED lighting for interior/exterior buildings; LED street lights with automated controls; irrigation automation system with weather data and leak detection system; more efficient pool heating system and; solar energy to help reduce cost and consumption.

- Water usage highest at Marina Park, greenbelts and Stenzel Park
- HVAC needs replacement at the Marina Community Center, Main Library and City Hall and Council Chambers
- The boiler at Farrelly Pool is at the end of its useful life; a new boiler will be more efficient
- Building automation system using Johnson Control should be extended to the Manor Library, South Library, and Aquatics Center
- Street lights and interior lights should be retrofitted with LED to drop consumption to 50%, while providing better light quality

Discussed benefits of a Mesh Network System for detailed control of street lights and batteries. WPCP would benefit from solar power. Initial estimate is a project cost of approximately \$8 million with annual savings of about \$500 to \$750 thousand and life cycle savings between \$13-\$16 million. If the City is interested into a self-funding approach, Climatec recommends subsidized funding (for alternative energy) from agencies such as Clean Renewable Energy Bonds (CREB <http://www.energy.gov/savings/clean-renewable-energy-bonds-crebs>). Next step is detailed assessment to be reviewed by Committee in December and full Council review in February for implementation authorization. At the Committee's request, Climatec will provide funding solutions, CREB information and Climatec's presentation to D. Pollart for distribution to the Committee. Measurement and verification process is required to ensure that project is self-funded.

2.B. Discussion Regarding Exploratorium Interactive Exhibit at Joaquin Plaza

J. Kay provided an update on the Living Innovation Zones project planned for the Joaquin Plaza. He described the seating prototype, its physical and sound design and commented how it is an architectural fit for the plaza. J. Kay's research returned positive feedback from the public. Phase 2 is going into effect and will drive the project quickly into full development.

The concern of the Committee is its safety design (behavioral) and the potential for additional design(s) (rotation). C. Zapata asked about the effect, if any, the sound will have on pets. J. Kay will ask the designers and get back to the Committee.

2.C. Regarding City Video Camera

R. Pio Roda provided information to the Committee on the current City surveillance camera inventory.

2.D. Project Updates

K. Cooke updated Committee on current City projects:

- San Leandro Bikeway East project - Completed. Bike lane and Class 2 Bike lane and signage have been implemented east of the railroad line.
- Street Sealing project - Nearly complete. Only the striping and bike lanes are needed.
- West Juana - Currently under construction. Underground work is currently underway, along with drainage, bulb-outs and cross walks.
- Street Rehab project - Preliminary work is underway on Dabner and Georgetown Streets. A ribbon cutting is scheduled for late October.
- Street Calming project - Complete listing of street calming being advertised on Nextdoor as well as door hangars placed on residents doors.
- Accessible Pedestrian Signals - Improvements underway at 15 intersections to make them completely accessible; funding from grants and Measure B.
- Siempre Verde Park - To be awarded at tonight's City Council Meeting. Project is under budget, which allows for the irrigation well, canopies and additional tables to be included. The Park will open on time and optional features listed above will be fully implemented.

2.E. Discussion Regarding Future Agenda Items

K. Cooke reviewed future agenda items for the October 6, 2015 meeting.

Mayor Cutter spoke about Oakes Boulevard. It is a main bike route but the condition of the street is hazardous for bicycle riders. She asked when repairs may take place and asked that staff notify citizens with updates of the improvement.

Councilmember Reed asked staff to be cognizant about number of items on the agenda and requested to limit the number of items so there would be more time for in-depth questions to be asked of presenters. K. Cooke will try to limit the number of topics to two.

Councilmember Lopez would like to keep the Neighborhood Traffic Calming project on the October agenda. She also asked for the results on the application process. Councilmember Lopez asked for another public outreach regarding the Bikeway project, with more focus on benefits for residents. With the recent incident at Washington Elementary School, staff should strive to consistently get the information out to the public in a timely manner.

Councilmember Lopez requested that staff be cognizant of full community participation when scheduling the time for the Siempre Verde Park ground breaking in October.

3. PUBLIC COMMENTS

Congratulations went out to Nick Thom for his promotion to City Engineer.

4. COMMITTEE MEMBER COMMENTS

5. ADJOURN



ENERGY/WATER SAVINGS FEASIBILITY ASSESSMENT



Smart Cities → Efficient Services

September 8, 2015

SAN LEANDRO KEY PARTICIPANTS



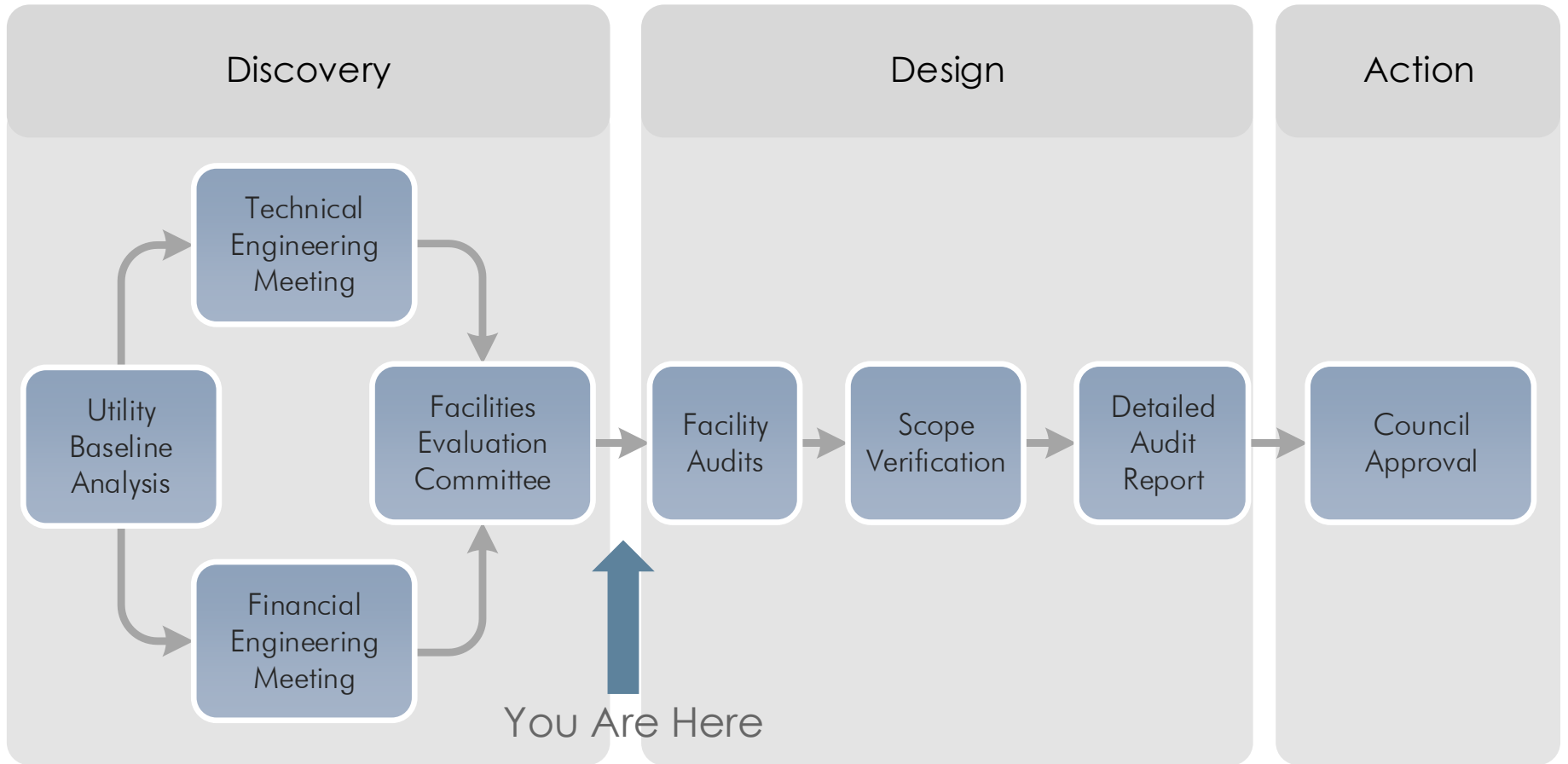
*Smart Cities →
Efficient Services*



SUNPOWER®

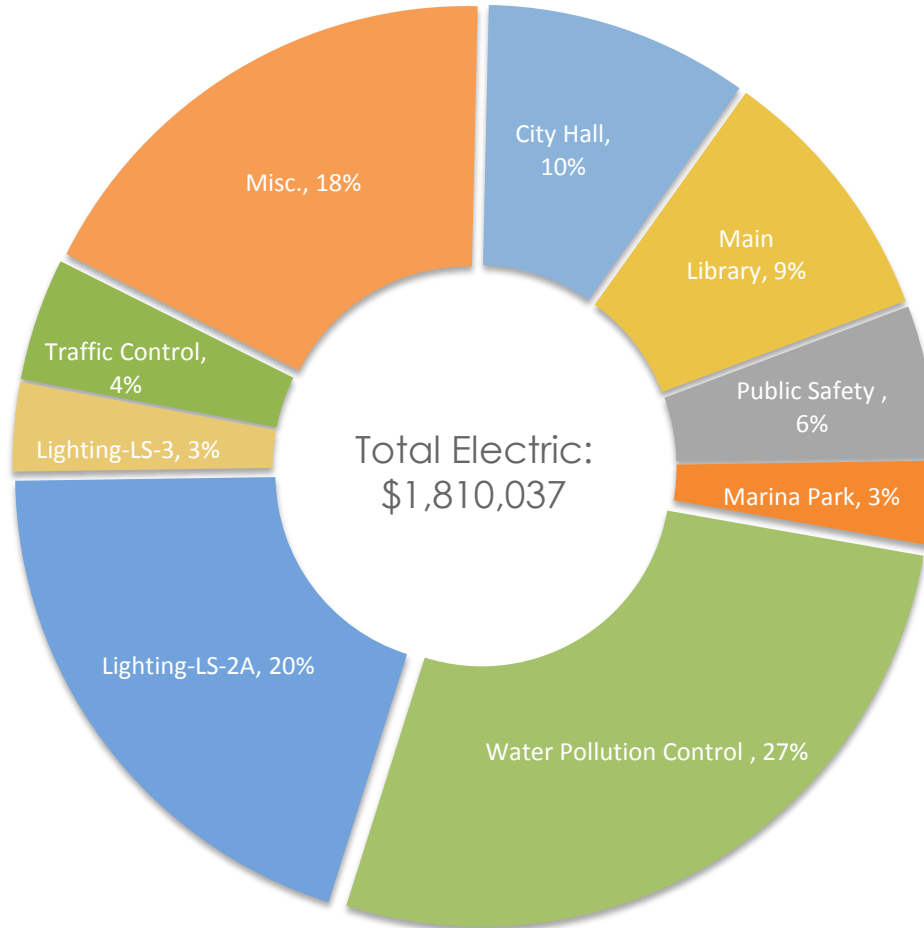


PROGRAM PROCESS



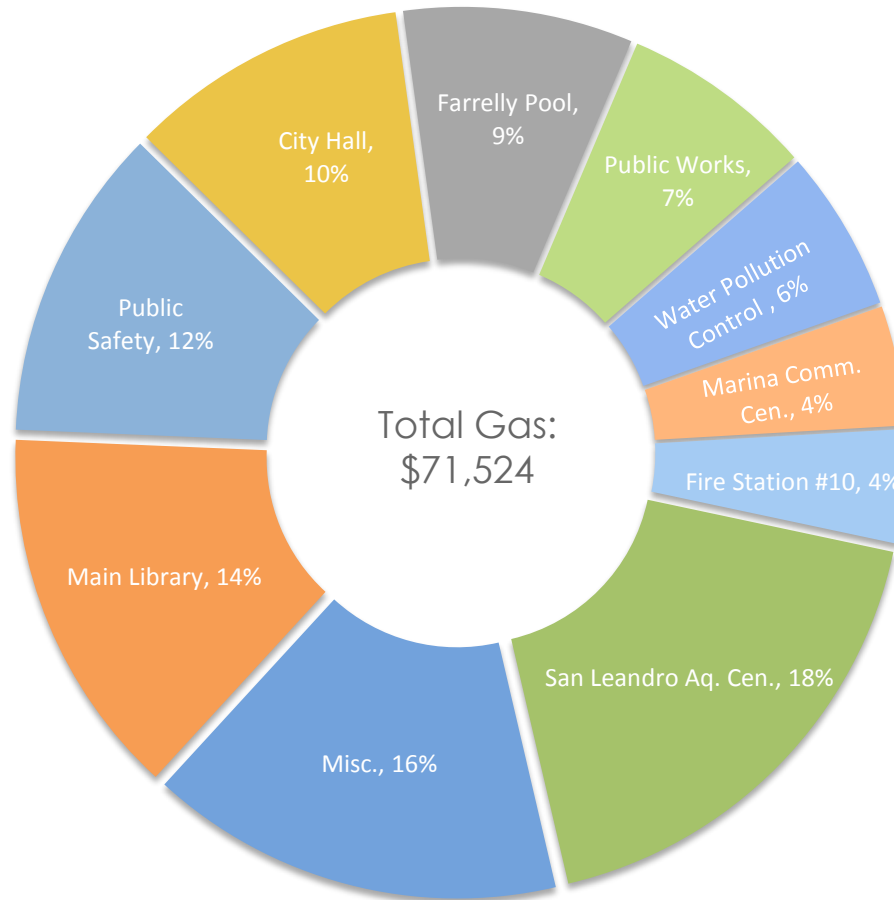
UTILITY EXPENDITURES

Electric Distribution



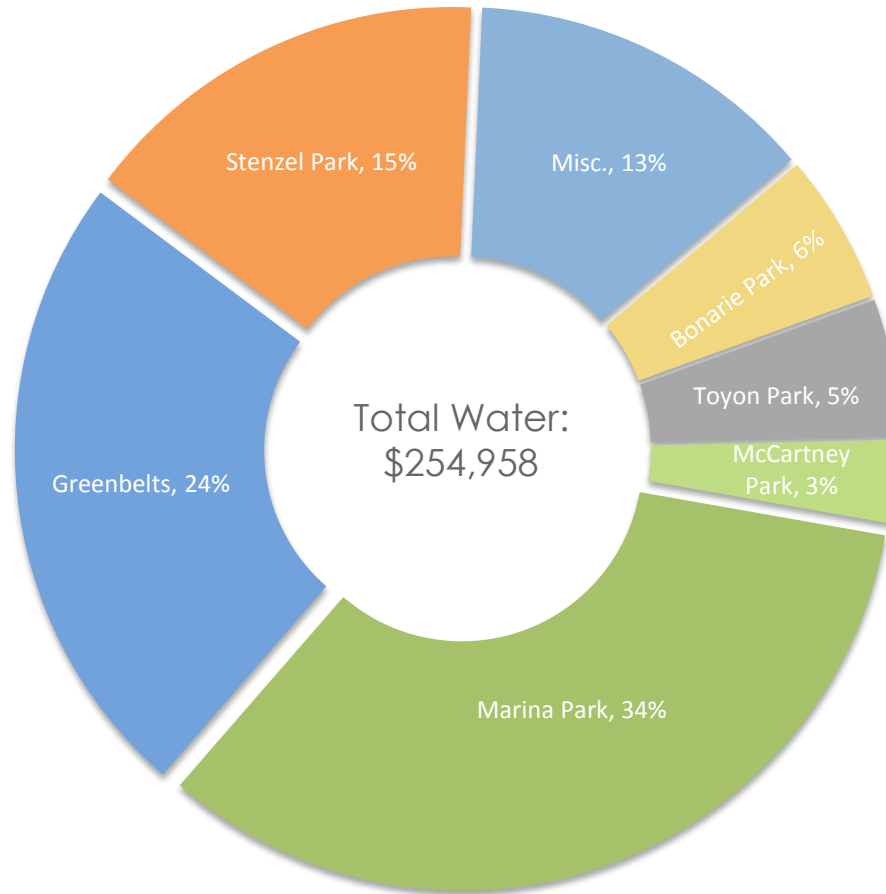
UTILITY EXPENDITURES

Gas Distribution



UTILITY EXPENDITURES

Water Distribution



PROGRAM GOALS



* Upgrade Existing Systems

- * Heating & Air Conditioning
- * Building Automation Control
- * Interior & Exterior Facility Lighting
- * Street Lighting – LED & Controls
- * Landscape Irrigation Control
- * Pool Heating Upgrades
- * Solar Energy Generation & Storage



* Reduce Energy & Water Costs



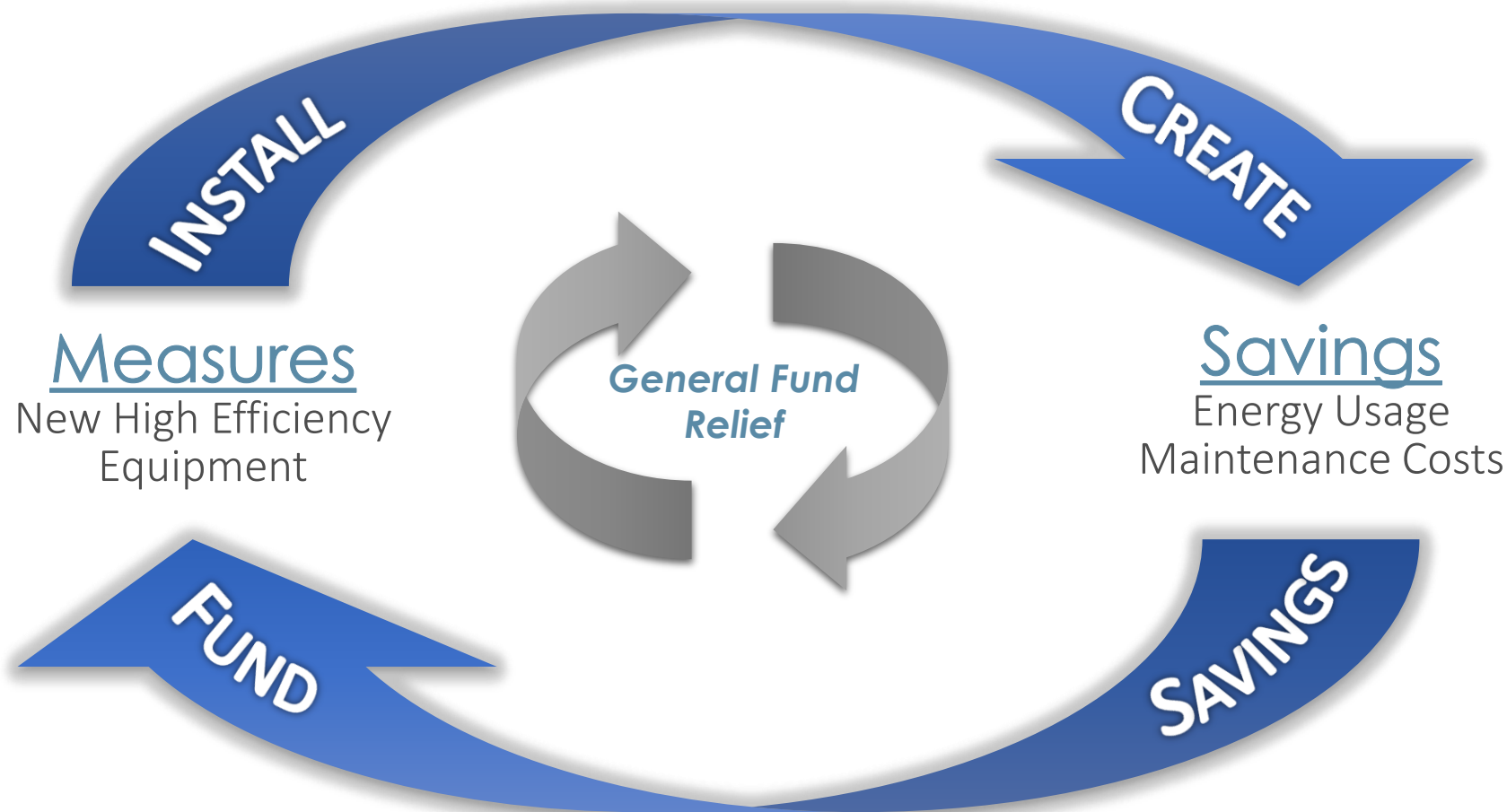
* Decrease Maintenance Costs

* Self-Fund Improvements

* Guarantee Financial Results



SELF FUNDED IMPROVEMENTS



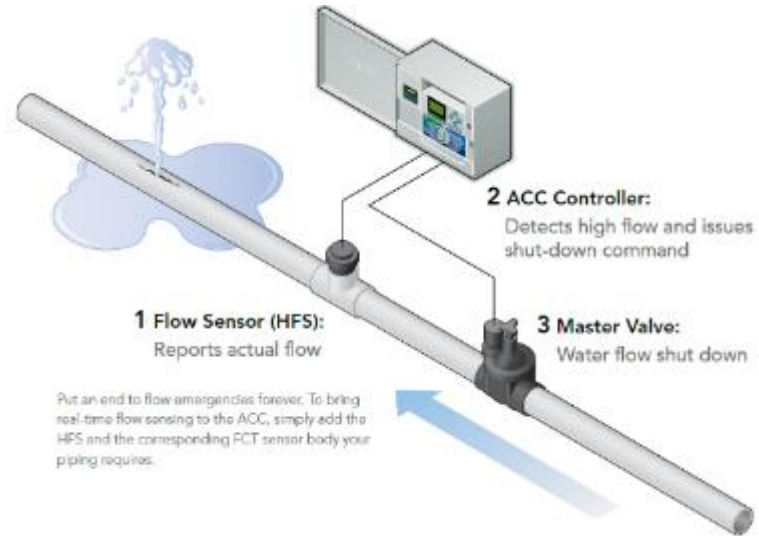
IRRIGATION UPGRADES

Weather Based Smart Irrigation Controls



Existing Controls

Recommended Controls



HVAC UPGRADES



Existing HVAC Equipment



Recommended
High Efficiency
HVAC Upgrades



POOL UPGRADES

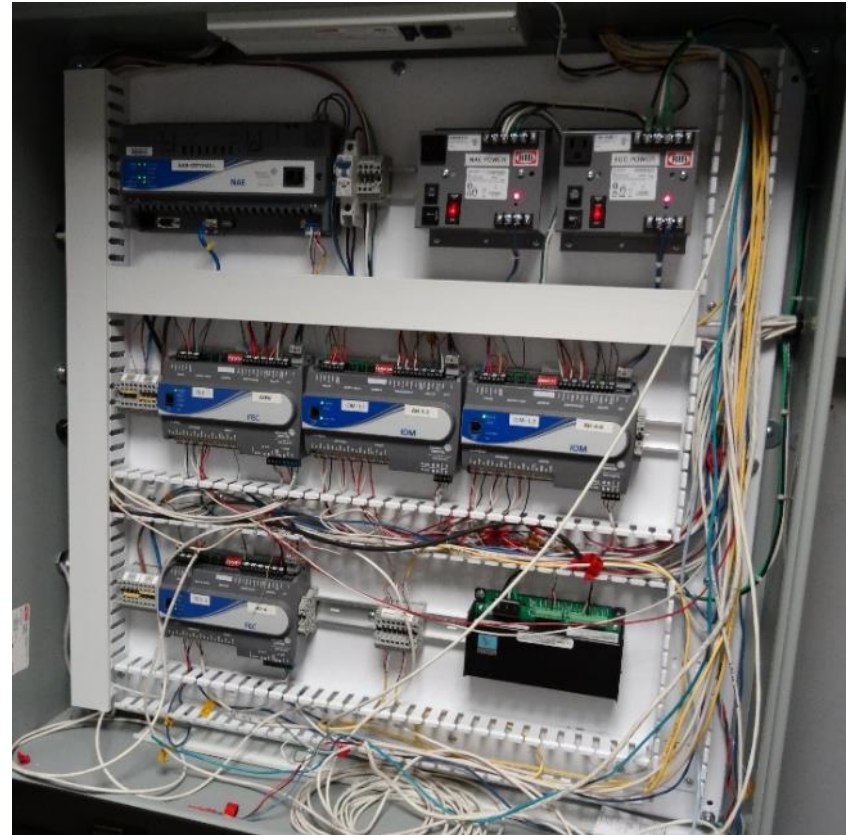
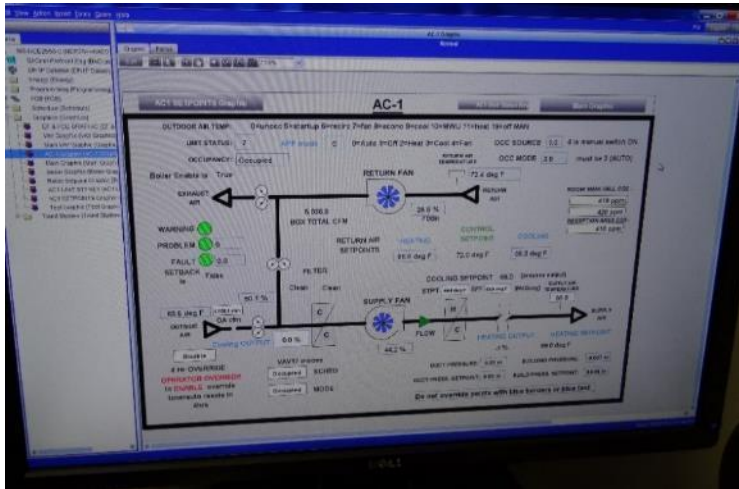


Existing Pool Boiler



Recommended High Efficiency Pool Boiler

BUILDING AUTOMATION SYSTEM



Upgrade
Thermostats to JCI

LIGHTING UPGRADES

Interior LED Upgrades



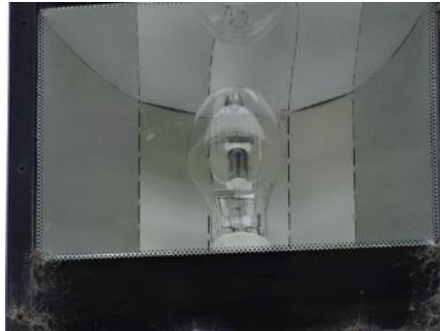
Existing Interior Lighting



Recommended LED Lighting

LIGHTING UPGRADES

Exterior LED Upgrades



Existing Exterior Lighting

Recommended LED Lighting

STREET LIGHT UPGRADES

LS-2



STREET LIGHT UPGRADES

LS-2



Before

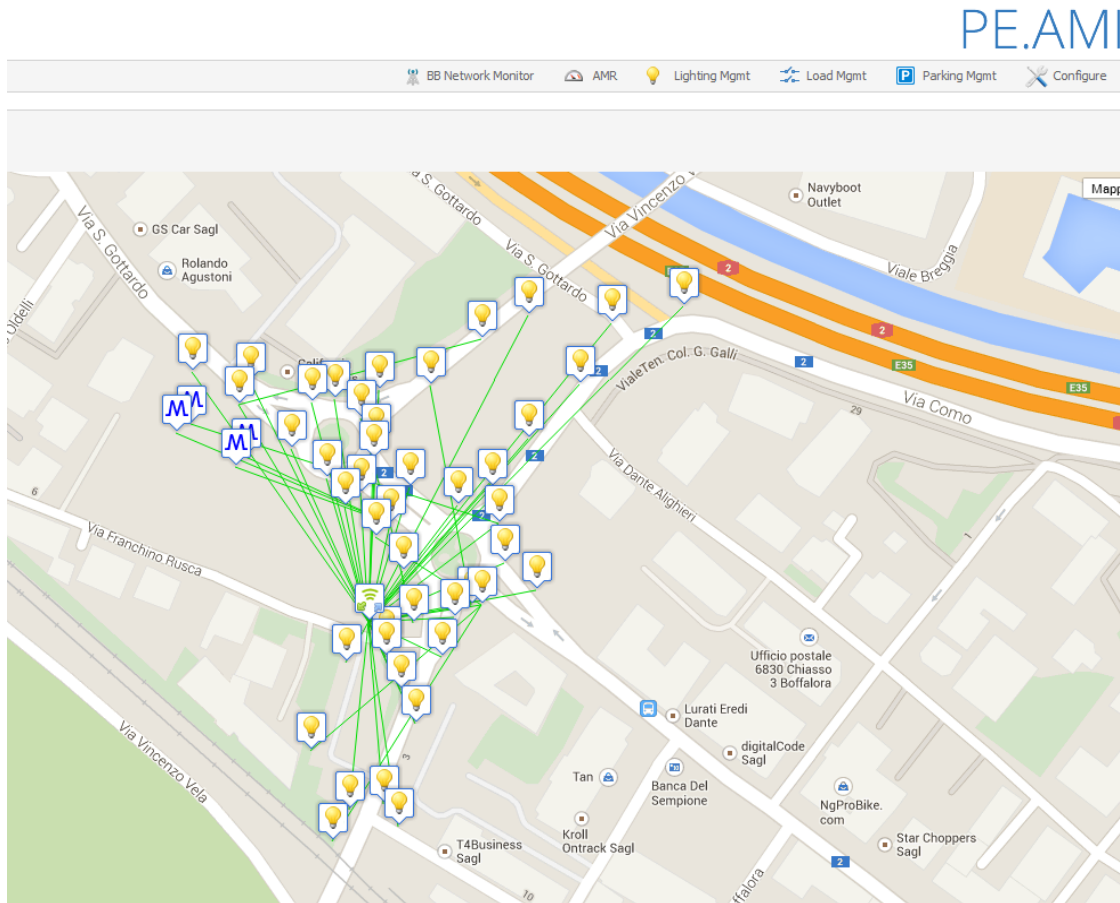


After



STREET LIGHT UPGRADES

Street Light Control & Monitoring



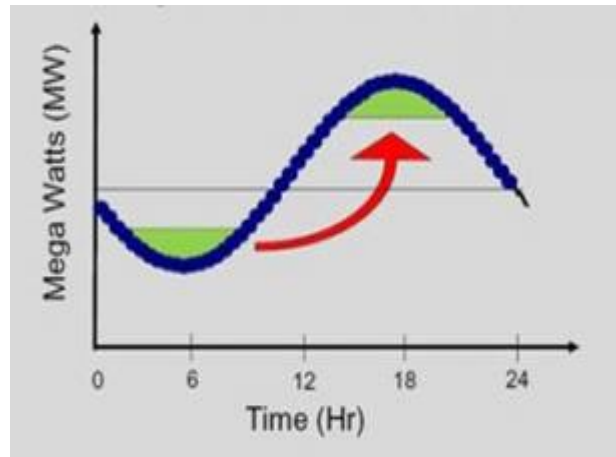
Key Features:

- * Adaptive Control
- * Dynamic Dimming
- * Individualized Power Reporting
- * Outage Detection & Maintenance Tracking
- * Interactive Mapping
- * Remote Access

BATTERY ENERGY STORAGE



Peak Shaving for
Demand Charge
Avoidance



Behind-the-Meter
Energy Storage



SOLAR PV SOLUTION



SUNPOWER SOLAR PV DETAILS

- * Size: 1 MW
- * Annual Production: 1,640,000 kWh
- * Mounting: Ground fixed tilt
- * System Offset: 99%

Water Pollution Control Plant



PRELIM FINANCIAL HIGHLIGHTS



Total Infrastructure Improvements	\$8 – 10 M
Annual Savings	\$550 – 750K
Lifecycle Savings	\$13 – 16 M
Capital Required	\$ 0

SAMPLE ENVIRONMENTAL BENEFITS



Savings from the anticipated energy project should translate into the following green equivalencies:



Remove **544** cars off the road



Save **295,450** gallons of gasoline



Preserve **77,725** trees from deforestation



Power **389** San Leandro homes



Provide drinking water for **41,719** San Leandro residents

NEXT STEPS



Climatec Competitively Selected	✓
Utility Analysis	✓
Technical / Financial Meetings	✓
Prelim Results to Facility Committee	TODAY
Engineering Site Walks	September
Scope Verified with Staff	November
DA Results to Facility Subcommittee	December
City Council Consideration	February '16

OPTIONS



Option A

Status Quo

- Continue As You Are
- Pay PG&E and EBMUD - 100%
- Endure High Utility and O&M Costs
- “Unnecessary” Expense

Option B

Energy Project

- Implement Efficiency Project
- Reduce Utility and O&M Costs
- New Equipment + Solar PV
- Save \$\$ + Energy + Water

CITY OF SAN LEANDRO

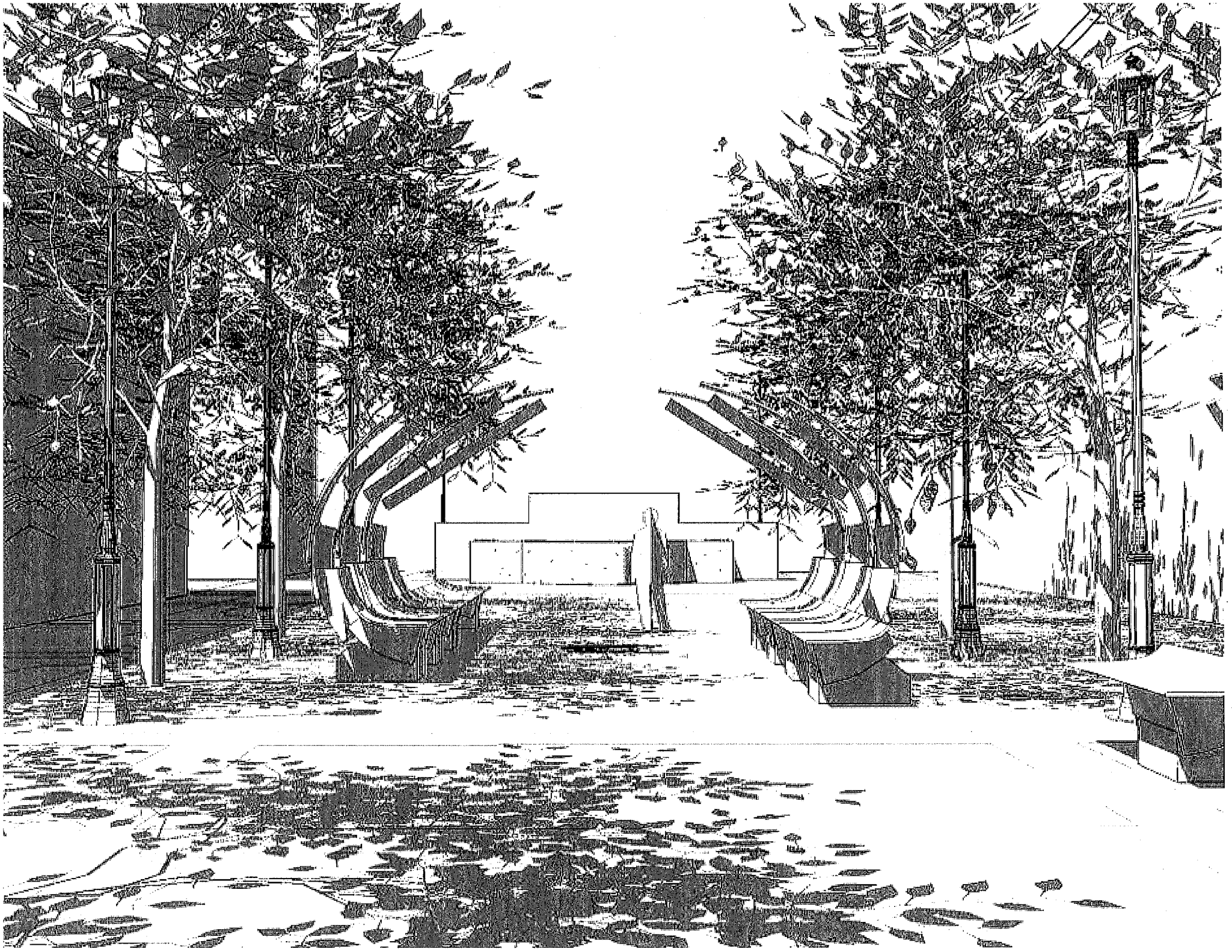
Facilities and Transportation Committee Meeting

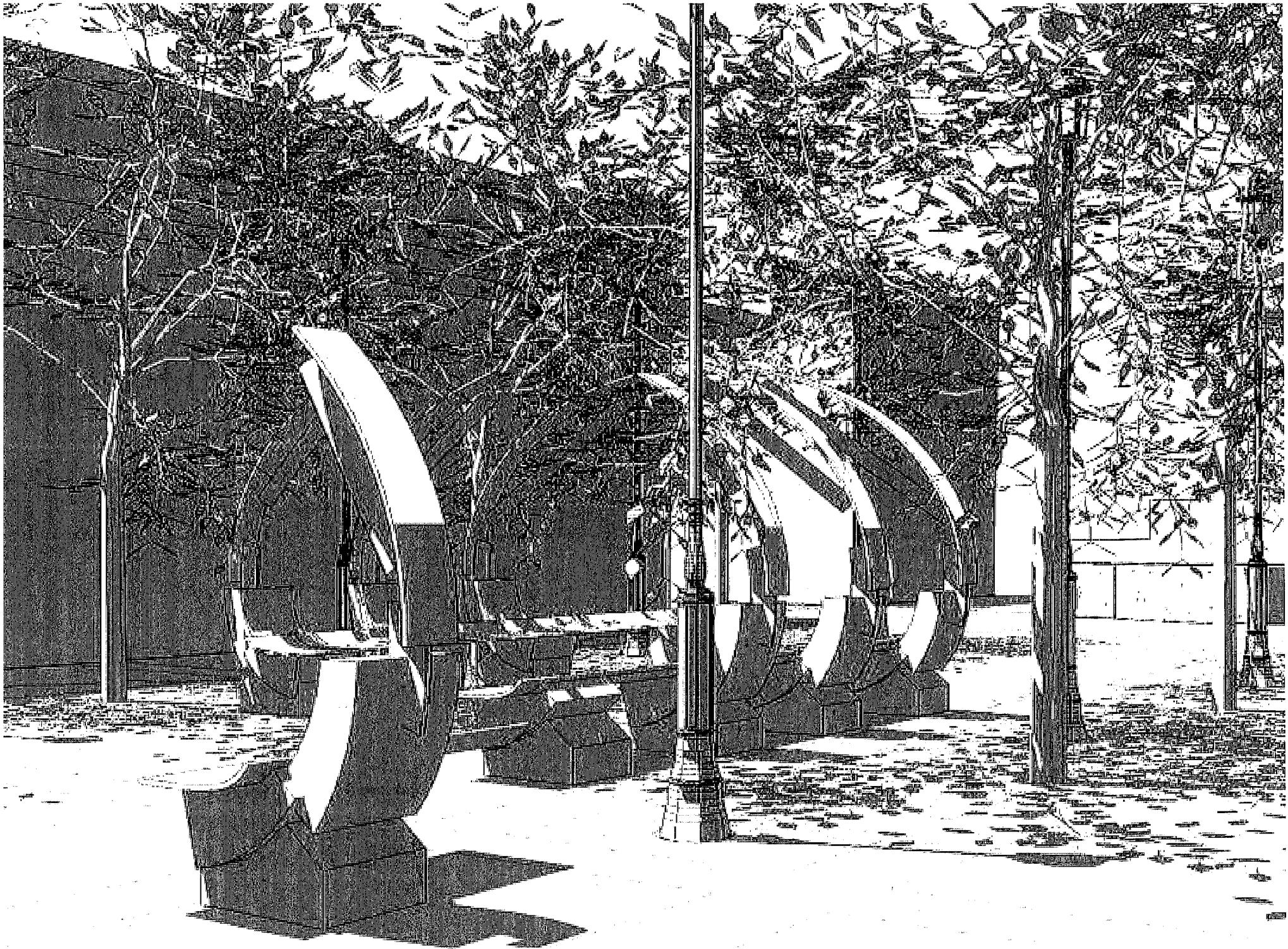
Tuesday, September 8, 2015

PUBLIC MEETING SIGN-IN SHEET

(This information may be used for future public hearing/meeting notification and may be published.)

PLEASE PRINT NAME	AGENCY/BUSINESS	PHONE NUMBER	PLEASE PRINT E-MAIL
Bruce Dickinson	Sun Power	510-290-8239	bruce.dickinson@sunpower.com
JEFF BARTZ	CLIMATEC	949-331-4027	jeffb@climatec.com
Tom Jackson	CLIMATEC	650-400-8744	tomj@CLIMATEC.COM
TEBBIE POLLART	CITY	510/577-6020	dpollart@sanleandro.org
Kirsten "Kimm" Foley	COSL / Engineering	x3432	kfoley@sanleandro.org
Richard D. Pio Roda	City Attorney	x 3361	rpioroda@meyersuave.com
Roh-Lin Chen	COSL / Senior Transportation Engineer	X3438	rchen@sanleandro.org
David Baum	City	3330	dbaum@ "
Jeff Key	City	3319	jkey@sanleandro.org
Austine Osakwe	City	x3486	aosakwe@sanleandro.org
Cynthia Gallagher	City of SL	x. 3352	cbattenberg@sanleandro.org
LUIS TORRES	CITY	3247	LTORRES " "
Samana Spagnoli	POLICE DEPT	3251	Sspagnoli*



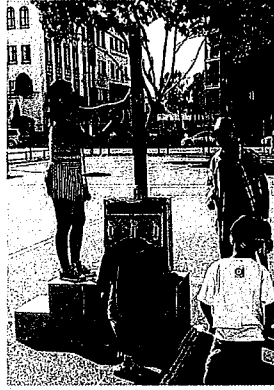




① Scaled Prototype



② 1:1 Prototype



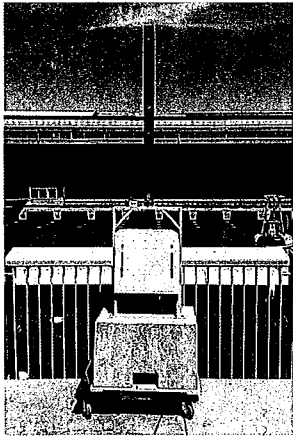
③ 1:1 Prototype @ San Leandro Cherry Festival
a. w/ hand held striker



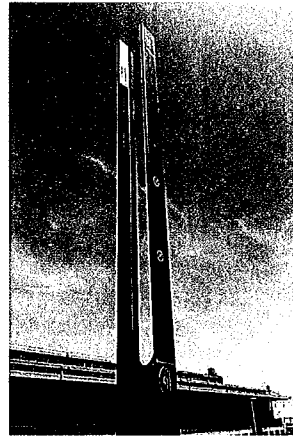
b. automatic striker



c. rocking chair activated striker



④ 1:1 Prototype #2



expl **oratorium**[®]
Studio for Public Space

www.exploratorium.edu/publicspaces

City of San Leandro
Joaquin Plaza

REVISIONS		
1	25% Phase 1 Set	03/06/15
2	1:1 Prototype	06/06/15
3	100% Phase 1 Set	06/29/15

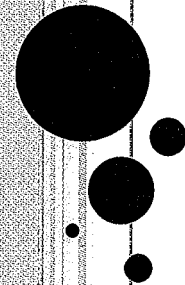
Prototypes

Project number 4779
Date 06/29/15
Drawn by
Checked by

A103

CIP Update

City Council Facilities Committee
September 8, 2015



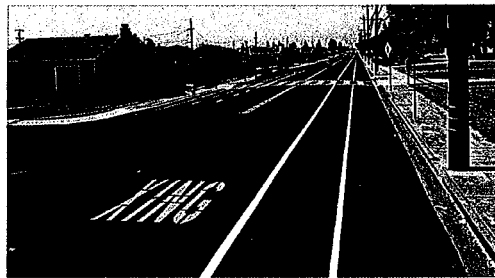
o San Leandro Bikeway East Improvements

- o Description: Installation of signs, pavement stripes and pavement markings to create 2.3 miles of Class II bike lanes and 10.5 miles of Class III bikeways east of the UPRR tracks. Also installed green bike lanes for the first time in San Leandro at various major intersections.
- o Status: Construction substantially completed in August. Contractor working on punch list.
- o Total project cost: \$400K
- o Funding source: Measure B Bicycle and Pedestrian Funds



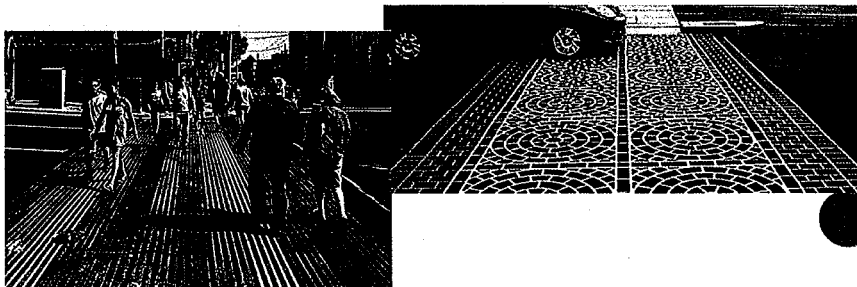
○ **Street Sealing**

- **Description:** Seal Williams, Merced, Fairway, Doolittle, and other streets in maint. area 4
- **Status:** Substantially complete, work is being reviewed for punch list
- **Total project cost:** \$1.3M
- **Funding source:** Gas Tax, Measure B Streets and Roads, Measure B bike and ped (ramps)



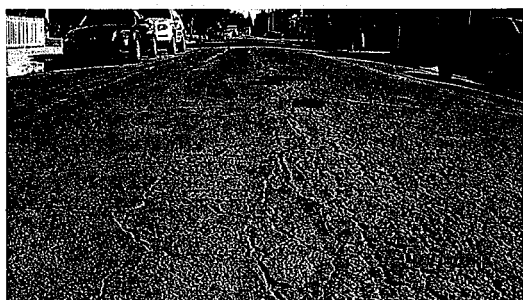
○ **West Juana Pedestrian Improvements**

- **Description:** Installation bulb outs and high visibility decorative crosswalks on West Juana from Carpentier Ave to Hays Ave.
- **Status:** Contractor started work in August, expected to complete by end of year.
- **Total project cost:** \$850K
- **Funding source:** RM2 grant, Measure B grant



o **Street Rehabilitation**

- o Description: Reconstruct Residential Streets- Dabner, Georgetown, Hanover, Victor, Amherst, Sydney, Graham. Install speed humps various locations
- o Status: NTP issued 8/27, expected to complete by end of year
- o Total project cost: \$1.3M
- o Funding source: Gas Tax, Measure B Streets and Roads, DFSI (speed humps)
- o Ribbon Cutting to be scheduled at completion



o **San Leandro Blvd Rehabilitation Williams to Hudson**

- o Description: Reconstruct San Leandro Blvd, install rectangular flashing beacons at Castro Street
- o Status: Working on obtaining PO, expect to compete work by end of year
- o Total project cost: \$1.6M
- o Funding source: OBAG grant, Measure B Streets and Roads



o **APS (Accessible Pedestrian Signal) upgrade 2012**

- o **Description:** Upgrade traffic signals and ramps to current ADA requirements at 15 intersections
- o **Status:** Notice to Proceed – 9/3/15, expect to complete work by February, 2016
- o **Total project cost:** \$660k
- o **Funding source:** Measure B Bike and Ped, Freedom grant, TDA grant



o **Siempre Verde Park**

- o **Description:** Rebuild park with all new amenities
- o **Status:** Award contract at 9/8 council meeting, expect to complete work by mid-summer 2016
- o **Total project cost:** \$3.3M
- o **Funding source:** HCD grant, Park Development Fees, General Fund
- o Ground Breaking in October

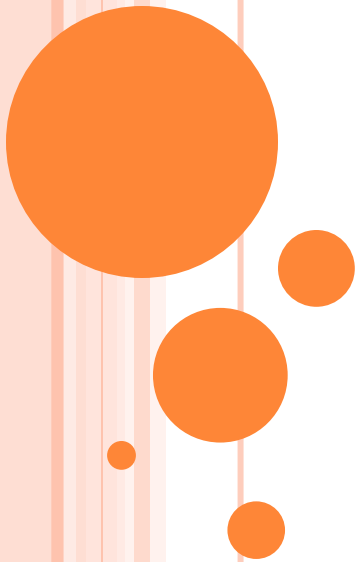


Questions?



CIP Update

City Council Facilities Committee
September 8, 2015



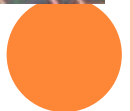
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City of San Leandro

Civic Center
835 East 14th Street
San Leandro, California

Meeting Agenda

Facilities & Transportation Committee

*Mayor Pauline Russo Cutter
Councilmember Corina N. Lopez
Councilmember Ursula Reed*

Tuesday, September 8, 2015

4:00 PM

Sister Cities Gallery

1. CALL TO ORDER (4:00 PM)

1.A. Attendance (4:01 PM)

1.B. Announcements (4:03 PM)

2. DISCUSSION ITEMS

2.A. Discussion Regarding Energy & Water Efficiency Projects Update (PWS) (4:05 PM)

2.B. Discussion Regarding Exploratorium Interactive Exhibit at Joaquin Plaza (CD) (4:35 PM)

2.C. Discussion Regarding City Video Camera (CAO) (5:05 PM)

2.D. Project Updates (5:10 PM)

2.E. Discussion Regarding Future Agenda Items (5:15 PM)

3. PUBLIC COMMENTS (5:17 PM)

4. COMMITTEE MEMBER COMMENTS (5:23 PM)

5. ADJOURN (5:30 PM)



ENERGY/WATER SAVINGS FEASIBILITY ASSESSMENT



Smart Cities → Efficient Services

September 8, 2015

SAN LEANDRO KEY PARTICIPANTS



*Smart Cities →
Efficient Services*



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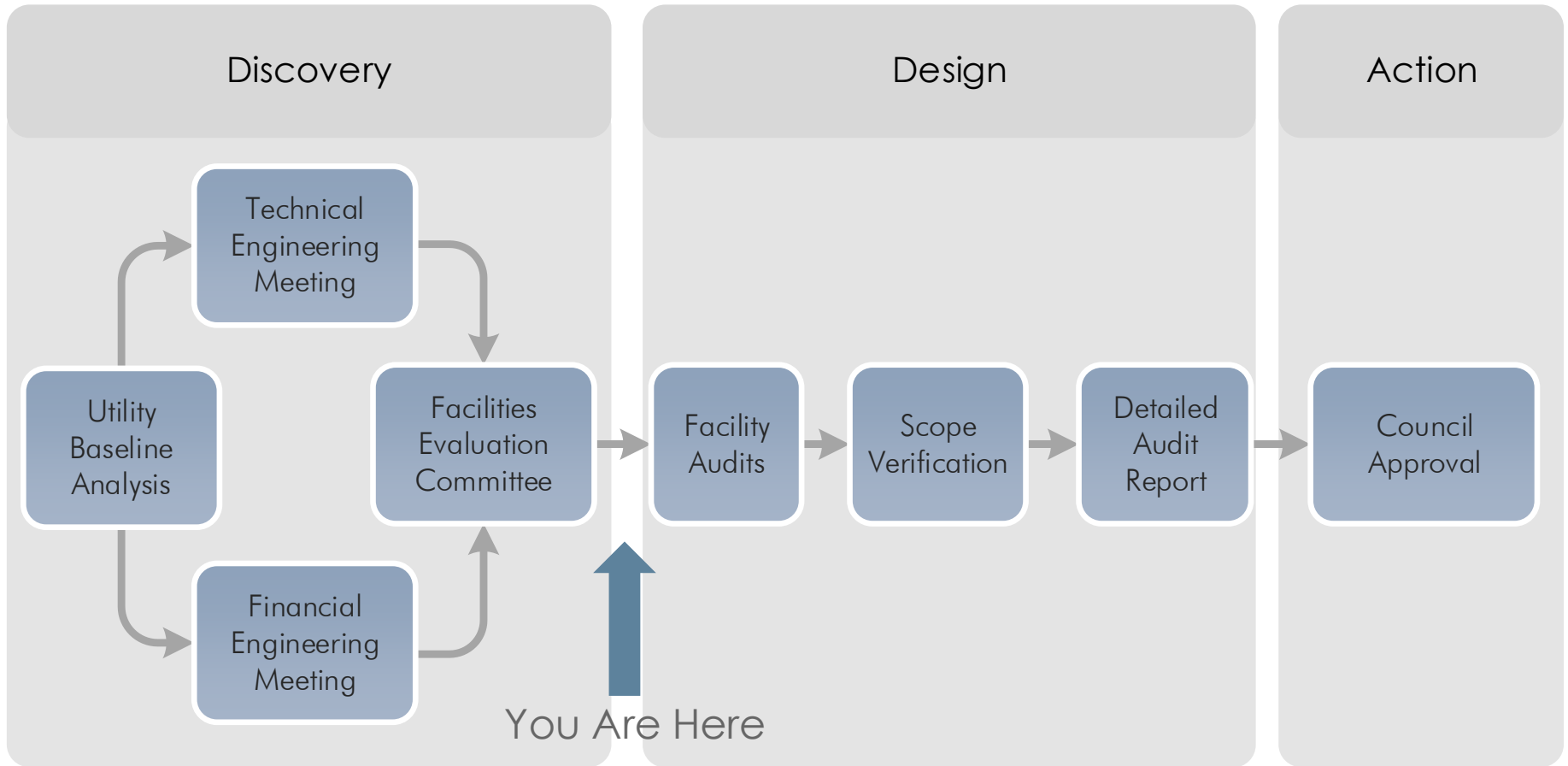
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Electric Company®*



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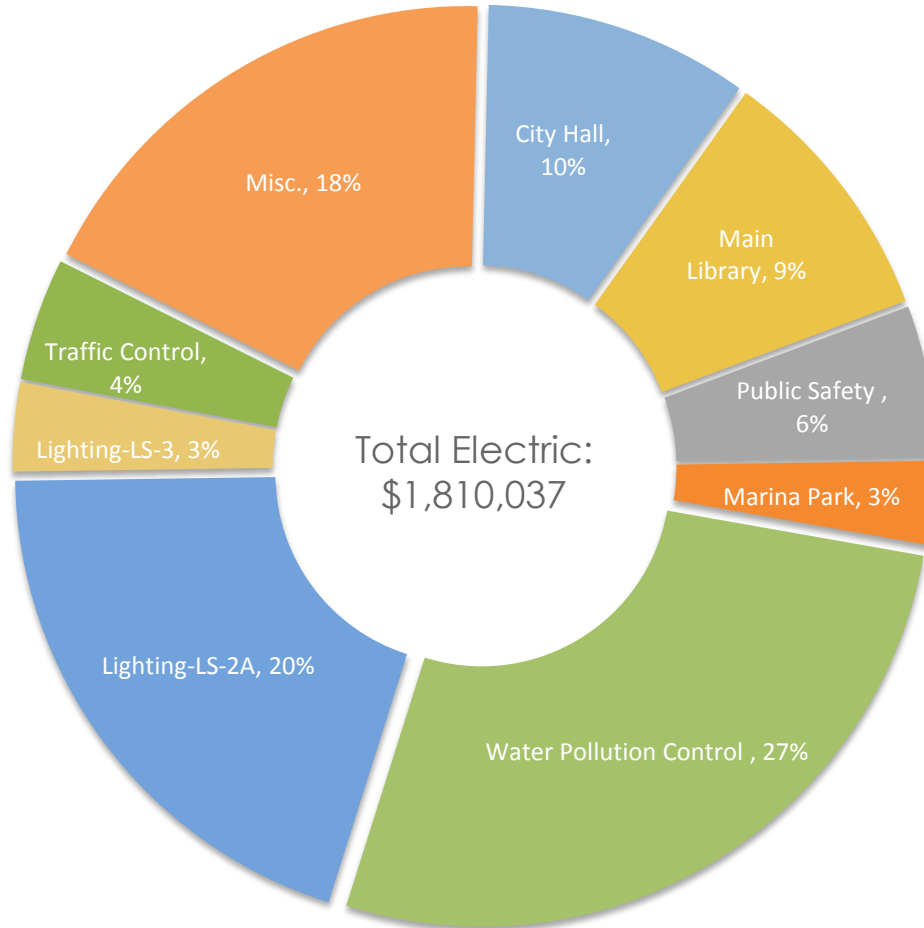


PROGRAM PROCESS



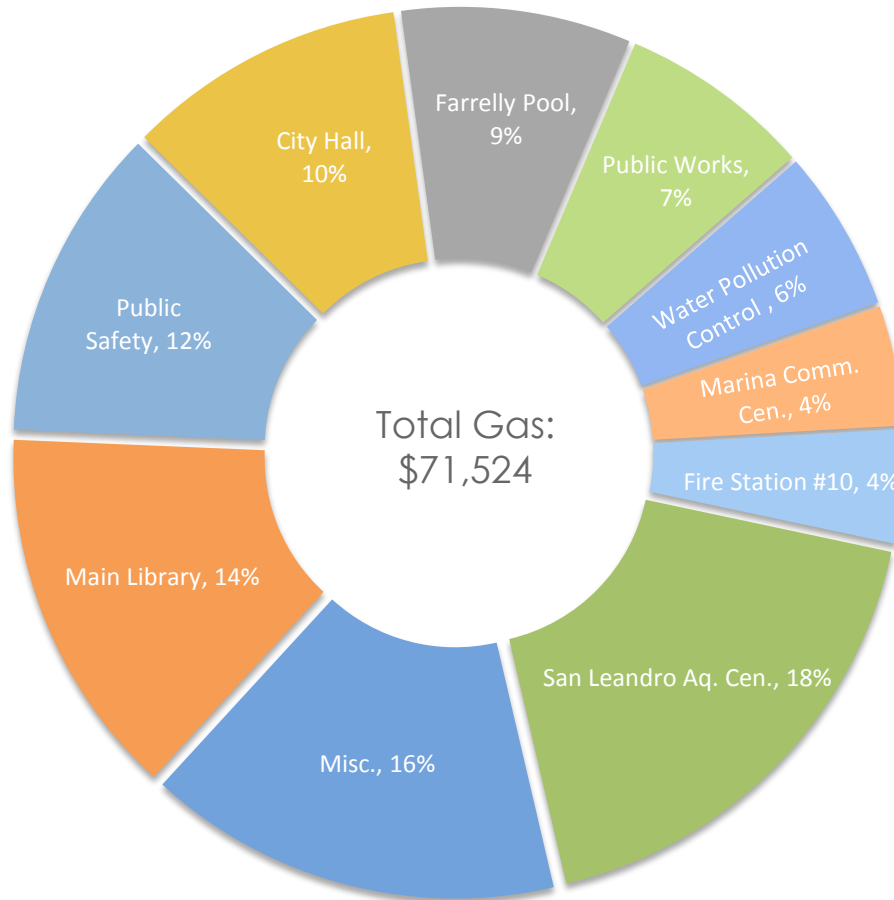
UTILITY EXPENDITURES

Electric Distribution



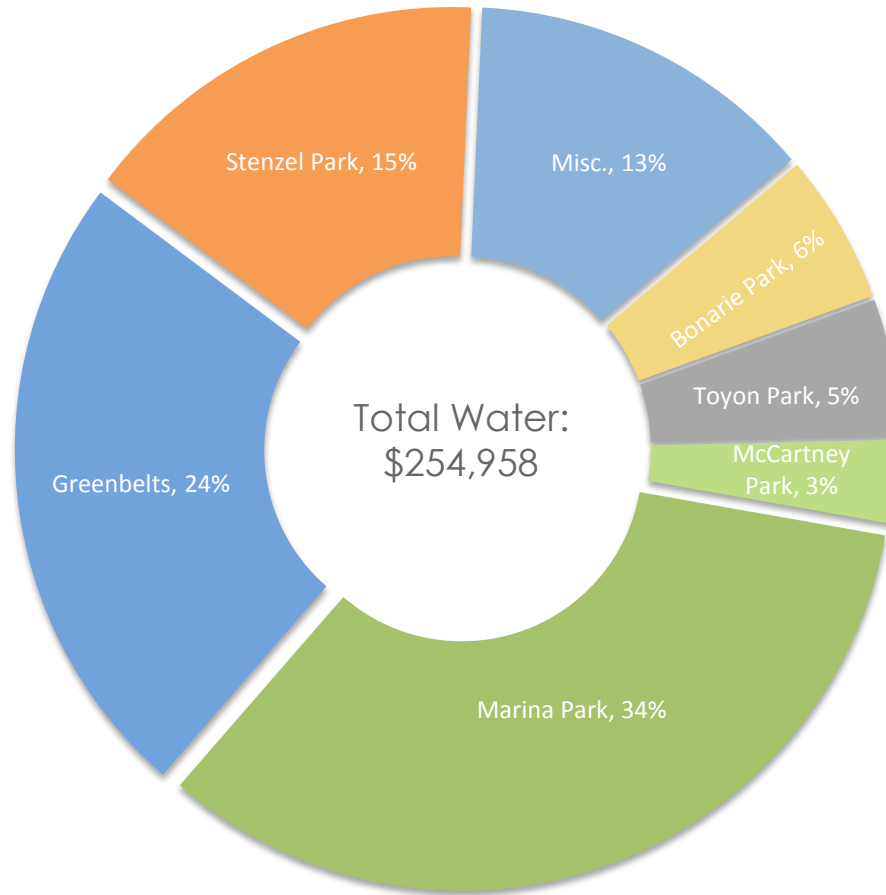
UTILITY EXPENDITURES

Gas Distribution



UTILITY EXPENDITURES

Water Distribution

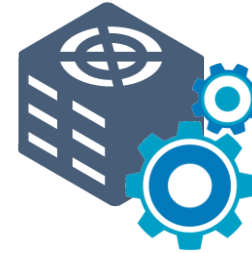


PROGRAM GOALS



* Upgrade Existing Systems

- * Heating & Air Conditioning
- * Building Automation Control
- * Interior & Exterior Facility Lighting
- * Street Lighting – LED & Controls
- * Landscape Irrigation Control
- * Pool Heating Upgrades
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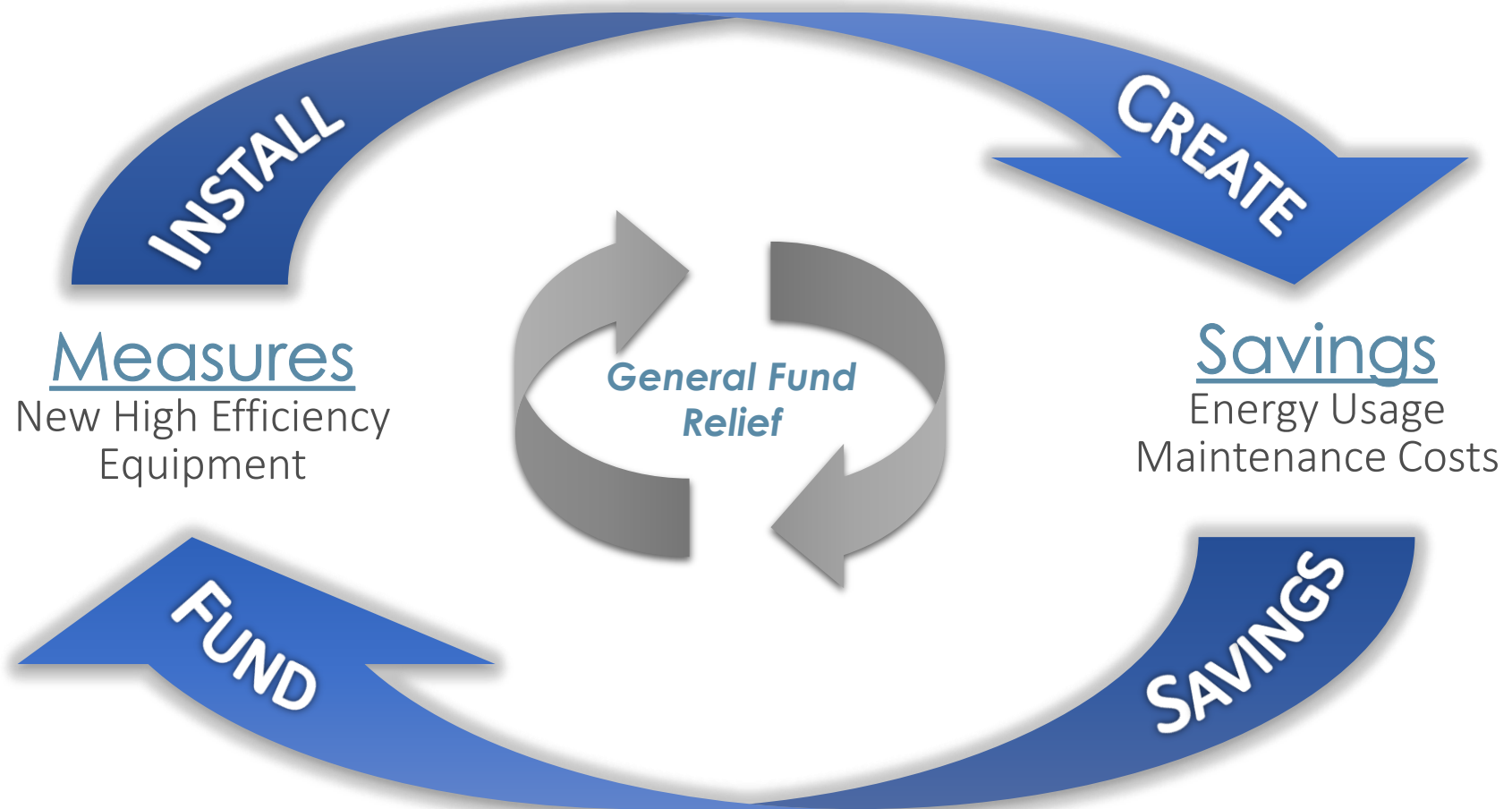
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SELF FUNDED IMPROVEMENTS



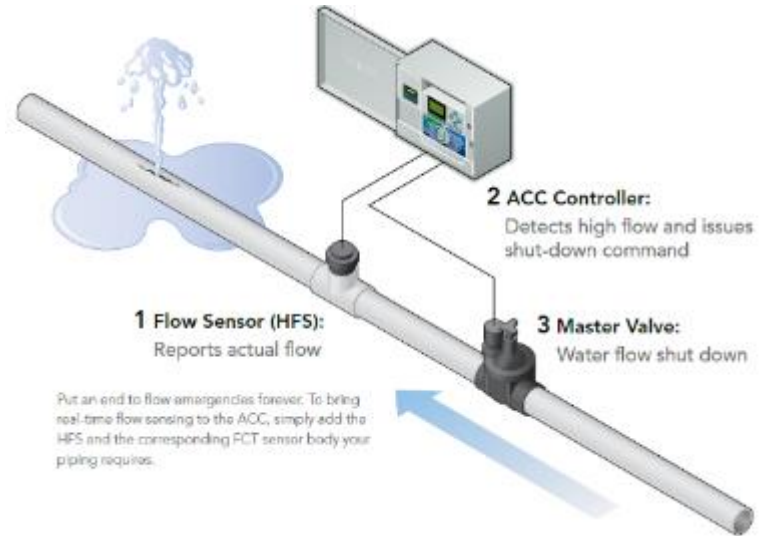
IRRIGATION UPGRADES

Weather Based Smart Irrigation Controls



Existing Controls

Recommended Controls



HVAC UPGRADES



Existing HVAC Equipment



Recommended
High Efficiency
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POOL UPGRADES

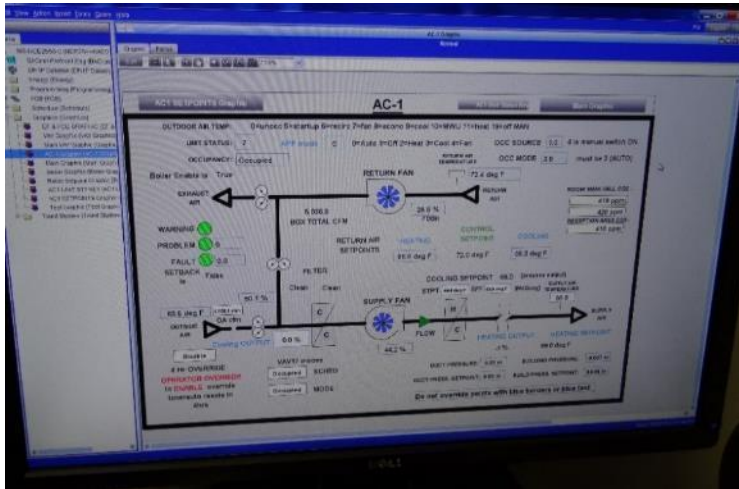


Existing Pool Boiler



Recommended High Efficiency Pool Boiler

BUILDING AUTOMATION SYSTEM



Upgrade
Thermostats to JCI

LIGHTING UPGRADES

Interior LED Upgrades



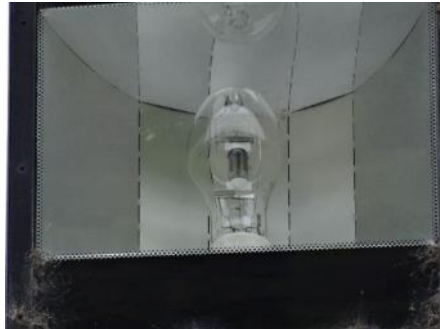
Existing Interior Lighting



Recommended LED Lighting

LIGHTING UPGRADES

Exterior LED Upgrades



Existing Exterior Lighting

Recommended LED Lighting

STREET LIGHT UPGRADES

LS-2



STREET LIGHT UPGRADES

LS-2



Before

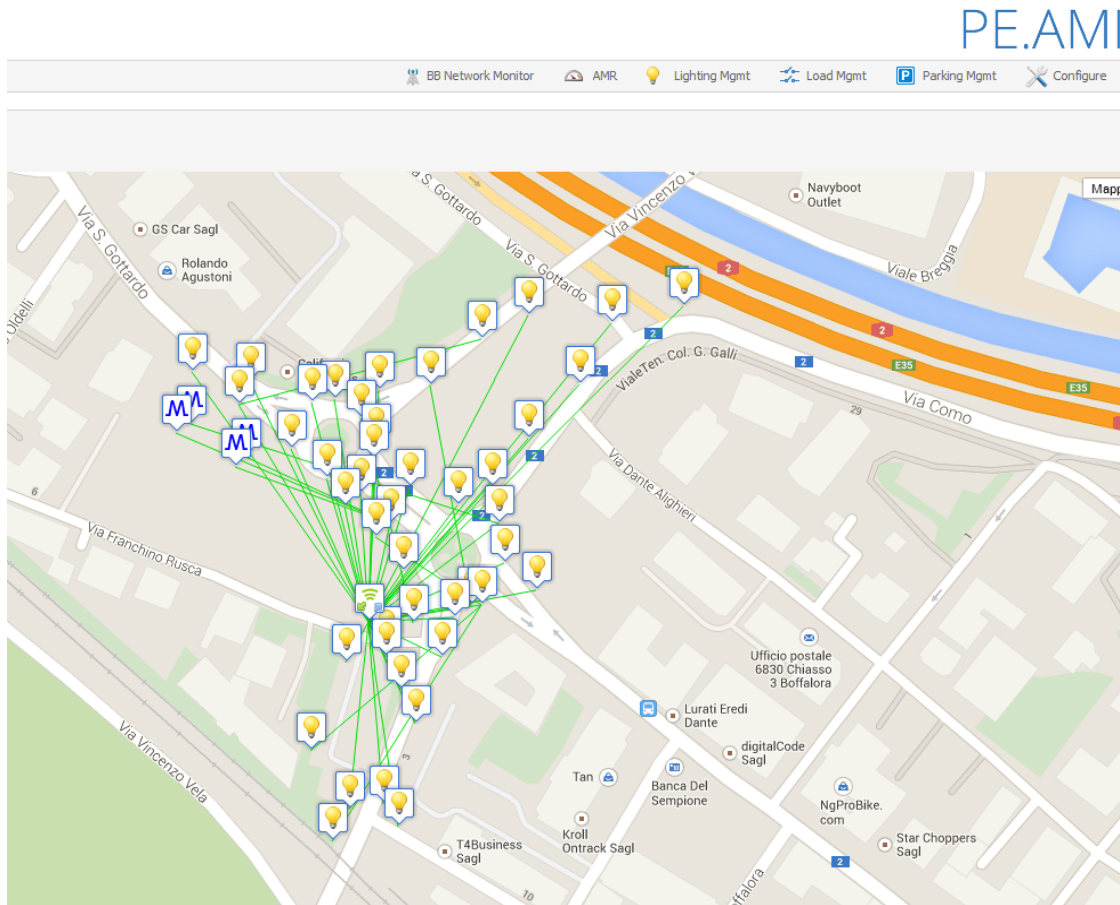


After



STREET LIGHT UPGRADES

Street Light Control & Monitoring



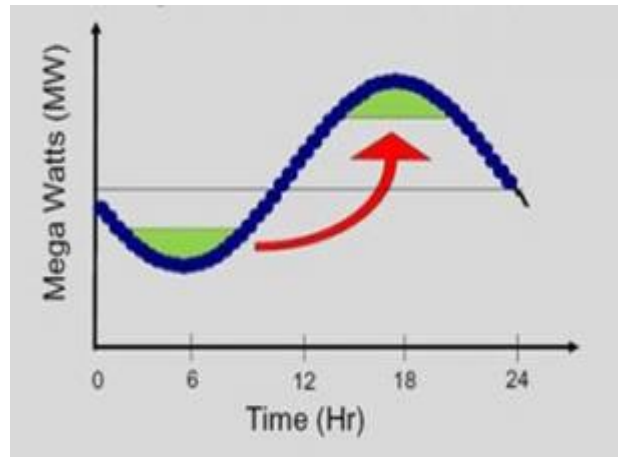
Key Features:

- * Adaptive Control
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BATTERY ENERGY STORAGE



Peak Shaving for
Demand Charge
Avoidance



Behind-the-Meter
Energy Storage



SOLAR PV SOLUTION



SUNPOWER SOLAR PV DETAILS

- * Size: 1 MW
- * Annual Production: 1,640,000 kWh
- * Mounting: Ground fixed tilt
- * System Offset: 99%

Water Pollution Control Plant



PRELIM FINANCIAL HIGHLIGHTS



Total Infrastructure Improvements	\$8 – 10 M
Annual Savings	\$550 – 750K
Lifecycle Savings	\$13 – 16 M
Capital Required	\$ 0

SAMPLE ENVIRONMENTAL BENEFITS



Savings from the anticipated energy project should translate into the following green equivalencies:



Remove **544** cars off the road



Save **295,450** gallons of gasoline



Preserve **77,725** trees from deforestation



Power **389** San Leandro homes



Provide drinking water for **41,719** San Leandro residents

NEXT STEPS



Climatec Competitively Selected	✓
Utility Analysis	✓
Technical / Financial Meetings	✓
Prelim Results to Facility Committee	TODAY
Engineering Site Walks	September
Scope Verified with Staff	November
DA Results to Facility Subcommittee	December
City Council Consideration	February '16

OPTIONS



Option A

Status Quo

- Continue As You Are
- Pay PG&E and EBMUD - 100%
- Endure High Utility and O&M Costs
- “Unnecessary” Expense

Option B

Energy Project

- Implement Efficiency Project
- Reduce Utility and O&M Costs
- New Equipment + Solar PV
- Save \$\$ + Energy + Water