

Thursday, February 21st, 2013

Hayward Citywide Streetlight Conversion
to Light-Emitting Diode (LED)

Agenda

- ✓ Introduction
- ✓ What you have told us...
- ✓ ABM History and Experience
- ✓ ABM Project Approach
- ✓ What we Discovered...
- ✓ What it means for the City of Hayward...
- ✓ Why ABM?
- ✓ Next Steps



Introduction – Team Members



Marina Pelosi, CEM –
Client Advocate

100% Referencable
Projects



Joe Murnin –
General Manager

Experienced Team
Advisor



Cameron Funk –
Project Developer

Expert - technical
and fiscal options



Mark Fisher –
Project Manager

On-Time and
On-Budget

What you told us...

- Seeking Turnkey conversion of **~7,750** Streetlights
- Geographic Information System (GIS) layer.
- \$3,000,000 – CEC Loan already approved.
- PG&E Rebates.
- **Primary Objectives of the Project:**
 - ✓ Available funds
 - ✓ Energy Savings
 - ✓ Area with Improved Lighting
 - ✓ High Quality Street Lighting



ABM History and Experience

- Founded in San Francisco in 1909
- 18,000 Employees in California
- 18+ ABM Employees live in Hayward
- More than 50 employees in Alameda County

Highlights

- \$4.4 billion in annual revenue
- 350 branch offices
- Nearly 120,000 service employees
- D&B rating of 5A2
- Founded in 1909
- Over 25,000 customers
- Public Corporation (NYSE: ABM)
- Sarbanes Oxley Compliant (SOX)



ABM Project Experience

City of Solano Beach

- Converted 667 fixtures
- On-Time and On-budget

City of Brea

- Converted 4,116 fixtures
- On-Time and On-budget

Hayward Hall of Justice

- Installation of Innovative Lighting Control System
- On-Time and On-budget

City of Oakland – Dalziel Garage

- Installation of LED fixtures and Lighting Control System
- On-Time and On-budget

City of Oakland – MLK Garage

- 45% Energy Savings
- Improved Light quality
- Improved Safety
- Creative solutions were discovered during the ABM Project Development Process

Bay Area Rapid Transit (BART)

- Upgrade Lighting System, 3,000+ fixtures
- Creative solutions were discovered during the ABM Project Development Process



Incentive and Rebate Program Experience



American Recovery & Reinvestment ACT (ARRA) funded Programs:



State Energy Program (SEP)



CA State Partnership Program



PG&E



SCE



SDG&E

- Emerging Technology Assistance Program (ETAP)
- Oakland Shines
- UC Santa Barbara Grant Application
- UC/CSU/CCC Master Agreement
- Administered MBCx Program for PG&E
- Custom Incentive Program
- Prescriptive (Deemed) Rebates
- On-Bill Financing (Energy Division Review)
- Administered MBCx Program for SCE
- Custom Incentive Program
- Prescriptive (Deemed) Rebates
- Custom Incentive Program

ABM Project Approach

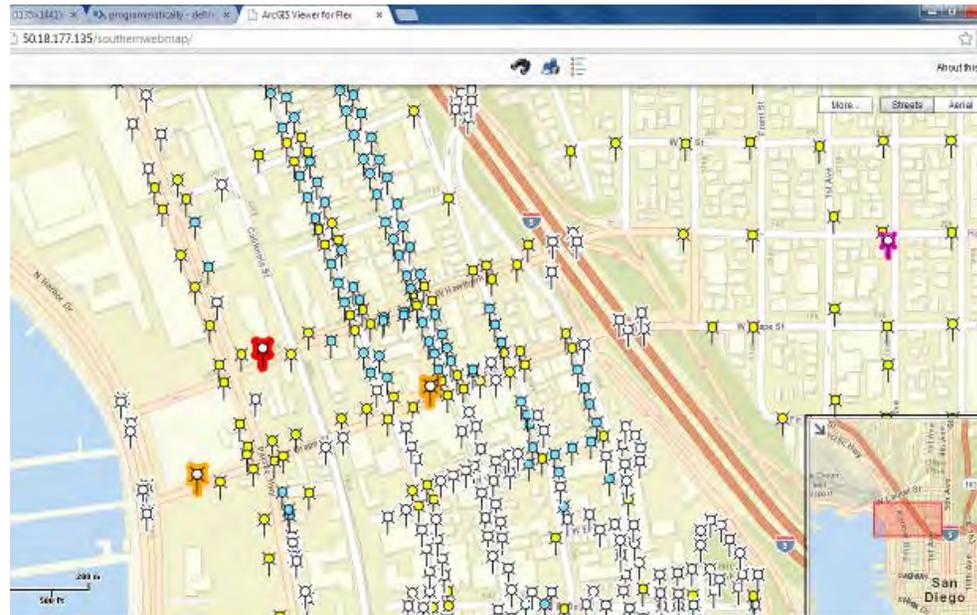
Project Milestones:

June 3, 2013 – Installed – 1st Lot of 2,000 Fixtures

July 8, 2013 – Installed - 2nd Lot of 2,000 Fixtures

August 12, 2013 –Installed - 3rd Lot of 2,000 Fixtures

September 10, 2013 – Installed - 4th Lot of 1,753 Fixtures



What we discovered...

| Item Description | 7753 – Fixtures |
|-------------------------------|--------------------|
| | Cree/Beta - XSP |
| Total Base Bid Amount: | \$2,872,410 |
| Total PG&E Rebates: | \$610,810 |
| Net Estimated Price: | \$2,261,600 |
| Simple Payback (Energy Only): | 6.17 Years |
| Additional Funds | ~\$700,000 |

What it means for The City of Hayward...

Great news...you have access to more than enough funds to convert 7,750 Streetlights!



Options:

- Existing Scope – Loan Re-Payment Satisfied Earlier than expected
- Expand the Scope to achieve updated infrastructure

Why ABM?

- ✓ **ABM is 100% Referencable**
- ✓ **ABM is the Local Choice**
- ✓ **Recognition you deserve**



Next Steps...

- ✓ Confirm CEC has fully executed Loan Agreement
- ✓ Order Equipment and Commence Streetlight Installation
- ✓ Discuss goals, needs and objectives
- ✓ Research best use of available funds
- ✓ Provide specific recommendations

What we discovered...

| Item Description | 7753 – Fixtures | |
|--|-----------------|-------------|
| | Cree/Beta - XSP | LEOTEK |
| TOTALS (Estimated Quantity – 7753) | \$2,872,410 | \$3,030,207 |
| Total Base Bid Amount: | \$2,872,410 | |
| Total Project Price: | \$2,872,410 | \$3,030,207 |
| Total PG&E Rebates: | \$610,810 | \$610,810 |
| Net Estimated Price: | \$2,261,600 | \$2,419,397 |
| Energy Cost Savings in First Year: | \$365,992 | \$309,315 |
| Energy Savings (kWh/year): | 2,817,870 | 2,384,784 |
| CO2 reduction (lbs/year): | 2,228,935 | 1,886,363 |
| Avoided maintenance expenses in 1st year: | \$63,962 | \$63,962 |
| Simple Payback (Energy Only): | 6.17 Years | 7.82 Years |

Potential City Lighting Opportunities

| Potential City Lighting Opportunities | | | | | | | |
|---------------------------------------|------------------------------------|------------------|----------------|-------------------|-------------------------|------------------------|-----------------|
| Area Description | Notes | Fixture Quantity | Estimated Cost | Estimated Rebates | Estimated Savings (kWh) | Estimated Cost Savings | Payback (years) |
| Municipal Lot 1 | Existing HID Cobra Head Fixtures | 16 | \$ 8,960 | \$ 2,325 | 12090 | \$ 1,581 | 4.20 |
| Municipal Lot 2 | Existing CREE LED Fixtures | 0 | \$ - | \$ - | 0 | \$ - | N/A |
| Municipal Lot 3 | Existing HID Cobra Head Fixtures | 4 | \$ 2,600 | \$ 800 | 3660 | \$ 480 | 3.75 |
| Municipal Lot 4 | Existing HID Cobra Head Fixtures | 8 | \$ 5,200 | \$ 1,400 | 6038 | \$ 887 | 4.28 |
| Municipal Lot 5 | Already Completed Per Don F. | 0 | \$ - | \$ - | 0 | \$ - | N/A |
| Municipal Lot 6 | Already Completed Per Don F. | 0 | \$ - | \$ - | 0 | \$ - | N/A |
| Municipal Lot 7 | Existing HID Cobra Head Fixtures | 1 | \$ 650 | \$ 200 | 915 | \$ 120 | 3.75 |
| Municipal Lot 10 | No Existing Lighting | 0 | \$ - | \$ - | 0 | \$ - | N/A |
| Municipal Lot 11 | Existing Decorative Pole Fixtures | 16 | \$ 8,960 | \$ 2,325 | 12090 | \$ 1,581 | 4.20 |
| City Hall Parking Garage | Existing Fluorescent Lighting with | 0 | \$ - | \$ - | 0 | \$ - | N/A |
| Cinema Place Parking Garage | Existing Fluorescent Lighting with | 0 | \$ - | \$ - | 0 | \$ - | N/A |
| Downtown Decorative Pole | Existing Decorative Pole Fixtures | 175 | \$ 118,125 | \$ 17,500 | 99000 | \$ 13,000 | 7.74 |
| Grand Total | - | 220 | \$ 144,495 | \$ 24,550 | 133,793 | \$ 17,649 | 6.80 |

Potential Project Outcome

| Description | Estimated Cost | Estimated Rebates | Estimated Savings (kWh) | Estimated Cost Savings | Payback (years) |
|-------------------------|----------------|-------------------|-------------------------|------------------------|-----------------|
| Original Project | \$ 2,872,410 | \$ 610,800 | \$ 2,817,870 | \$ 365,992 | 6.17 |
| Potential Opportunities | \$ 144,495 | \$ 24,550 | \$ 133,793 | \$ 17,649 | 6.80 |
| Blended | \$ 3,016,905 | \$ 635,350 | \$ 2,951,663 | \$ 383,641 | 6.21 |