



CALIFORNIA'S  
COALITION  
*for* ADEQUATE  
SCHOOL HOUSING<sup>SM</sup>

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## **C.A.S.H. Maintenance Network Regional Workshop**

**Friday, November 6, 2009**

9:00 a.m. to 12:00 p.m.

Clovis Unified School District Professional Building

1680 David E. Cook Way

Clovis, California

### **ALTERNATIVE PROJECT DELIVERY MAINTENANCE STYLE**

### **JOE DIXON**

Co-Chair, C.A.S.H. Maintenance Network

C.A.S.H. Board Member

Santa Ana USD

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CALIFORNIA'S COALITION *for* ADEQUATE SCHOOL HOUSING

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Handout materials are available online after the workshop. To download the materials, visit [www.cashnet.org/meetings](http://www.cashnet.org/meetings) and click on the link labeled "Workshop and Conference Handouts."

## CASH Maintenance Network 2009



Alternative Project  
Delivery  
Maintenance Style

Presented By  
Joe Dixon  
CASH Maintenance  
Network Co-Chair



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## School Facilities



- Catalyst for economic growth in our communities
- Facilities happen against all odds!
- Require leadership and persistence
- Highly regulated and controlled activities
- Multi-disciplinary and multi-layered
- The most complex and politically influenced school business program area
- One of your most rewarding activities

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## Alternative Project Delivery – Maintenance Style



### Alternative Methods To Fund Maintenance

- Creativity – Look Outside The Box
- Aggressiveness – Make It Your Idea
- Pressure – State The Need
- PLANNING – Keep Good Data

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## Creativity



- Think Outside The Box
- Performance Contracting
  - HVAC
  - Roofing
  - Lighting
  - *Renewable Energy*

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## Renewable Energy



### Think Outside The Box

- Solar Photovoltaic Projects
  - Case Study – Santa Ana Unified School District

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## Renewable Energy



### Project Breakdown

- Saddleback High School Proposed Project:
  - Solar Photovoltaic System – Measure G
  - Solar Thermal Heating – Measure G
  - “Cool” Roofing - ERP
  - HVAC Replacement - Modernization
- Funding Sources:
  - Measure G/QSCB: \$5,873,115
  - Emergency Repair Program: \$4,078,864
  - Modernization: \$2,526,206
- Total: \$12,478,185

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## Renewable Energy



### Potential Savings – Synopsis

	Fully Funded by Measure G	Repay Measure G with Savings
Fiscal Year 2010/2011	\$617,952	\$181,852
Fiscal Year 2014/2015	\$3,061,236	\$880,736
Year 25	\$14,862,351	\$8,325,127

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## Renewable Energy



### Year 5

- Energy Savings: \$989,001
- Natural Gas Savings: \$173,014
- SCE “Renewable Rate” Savings: \$216,278
- CSI: \$1,663,689
  
- **Total Program Savings: \$3,003,239**
- Payment/Net/Cumulative: \$1,519,961

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## Renewable Energy



### Performance Contracting

- HVAC
- Lighting
- Roof
- Water

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## Renewable Energy



### Water



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## Benefits

- Multipurpose field/sport usage
- Standard 10-year warranty
- UV resistant



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## Justification

<b>LABOR</b>					
<b>Function</b>	<b>Task</b>	<b>Hours</b>	<b>Salary and Benefits</b>	<b>1<sup>st</sup> Year + 2.5% COLA</b>	<b>Total 10 Years w/COLA</b>
Cleaning	Clean and sweep stadium	124	\$34	\$4,321	\$48,414
Cleaning	Vacuum field	24	\$34	\$836	\$9,371
Equipment Operator	Mow	560	\$36	\$20,664	\$231,507
Fertilizing	Hand labor	8	\$40	\$328	\$3,675
Fertilizing	Equipment operators	10	\$40	\$410	\$4,593
Football	Level field	42	\$34	\$1,464	\$16,398
Football	Paint lines	138	\$34	\$4,809	\$53,880
Graduation	Temporary fencing	34	\$34	\$1,185	\$13,275

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## Justification

<b>LABOR</b>					
Function	Task	Hours	Salary And Benefits	1 <sup>st</sup> Year + 2.5% COLA	Total 10 Years w/COLA
Irrigation	Simple repairs	72	\$34	\$2,509	\$28,112
Irrigation Specialist	Major repairs	70	\$43	\$3,085	\$34,565
Pesticide	Simple applications	6	\$34	\$209	\$2,343
Pesticide	Specialized applications	25	\$27	\$692	\$7,751
Renovations	Hand labor	24	\$34	\$836	\$9,371
Renovations	Operate equipment	36	\$36	\$1,328	\$14,883
Soccer	Paint lines	52	\$34	\$1,812	\$20,303
Soccer	Level field	42	\$34	\$1,464	\$16,398

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## Justification

<b>LABOR</b>					
Function	Task	Hours	Salary And Benefits	1 <sup>st</sup> Year + 2.5% COLA	Total 10 Years w/COLA
Track	Chalk lines	48	\$34	\$1,673	\$18,741
Track	Drag track	72	\$34	\$2,509	\$28,112
Track	Scarify track	34	\$34	\$1,185	\$13,275
Weeding	Hand labor	16	\$34	\$558	\$6,247
<b>Total Labor</b>				<b>\$51,878</b>	<b>\$581,213</b>

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<b>\$633,091</b>
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## Justification

### EQUIPMENT/SUPPLIES

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Item	1st Year + 2.5% COLA	Total 10 Years w/COLA
Brick dust	\$1,128	\$12,637
Chalk and equipment - track season	\$435	\$4,873
General equipment (amortized over 10 years)	\$3,000	\$33,610
Graduation temporary fencing supplies, sod patching	\$1,179	\$13,209
Irrigation - materials	\$5,535	\$62,011
Paint striper/servicing and supplies	\$359	\$4,022

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## Justification

### EQUIPMENT/SUPPLIES

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Item	1st Year + 2.5% COLA	Total 10 Years w/COLA
Paint - soccer season	\$718	\$8,044
Sand/soil mix	\$1,025	\$11,483
Sod (amortized over 10 years)	\$7,000	\$78,424
Weed abatement, fertilizer, pesticides	\$1,486	\$16,648
<b>Total Equipment/Supplies</b>	<b>\$23,997</b>	<b>\$268,848</b>

Total One-time Repair (remove transite irrigation system)

**\$292,845**

**\$50,000**

**GRAND TOTAL EXPENSE  
FOR 10 YEARS**

**\$975,936**

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## Impact on Education



- *Researchers have repeatedly found a difference of between 5-17 percentile points between achievement of students in poor buildings and those students in above-standard buildings, when the socioeconomic status of students is controlled <sup>1</sup>*



- <sup>1</sup> Glen I. Earthman, "School Facilities Conditions and Student Academic Achievement." Report prepared for Williams v. State of California, UCLA, 2002, pp. 8-9.