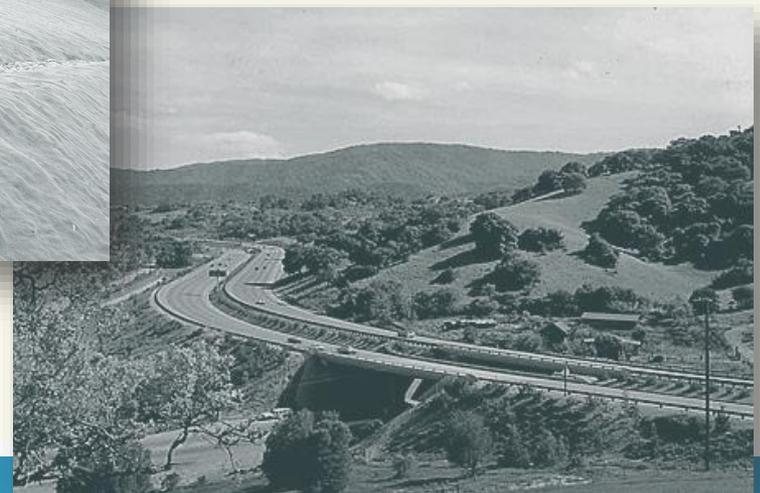


# LANDSCAPE & EROSION CONTROL

# 2016 CONTRACTOR MEETING



Item 1

# REGISTRATION



Item 2

# WELCOME



Item 3

# GROUND RULES

photo credit:

Diversified Landscape Company



Item 3

# AGENDA REVIEW



photo credit:

**Acacia Erosion Control**

Acacia has taken on some of the most challenging slopes in California, ranging from large-scale tunnel and bridge projects to failing coastal slopes and bluffs.

Item 4

# ECONOMIC FORECAST



Item 4

# ECONOMIC FORECAST - 4 topics

4a

## **Drought Response**

Investments in Emergency Contracts/Directors Orders to Implement Irrigation Upgrades, Increase Recycled Water and Reduce Potable Water Use

4b

## **Highway Planting Projects**

No Change, Delayed or Postponed

4c

## **Tree Mortality**

Task Force Data and Future Funding for Tree Removal

4d

## **SHOPP Program Realignment**

How Asset Management will Guide SHOPP Funding Decisions

## Item 4a Drought Response

### Emergency Contracts/Directors Orders (ELB)

Year	Projects Awarded	Value	% Complete (statewide average)
2014	35	\$47,948,970*	95%
2015	13	\$18,874,000*	79%
2016	55	\$132,188,018 *	42%
<b>Total</b>	<b>103</b>	<b>\$212,842,988 *</b>	

\* Capitol only

Item 4b

# Drought Response - Increasing Recycled Water

**USING  
RECYCLED  
WATER**

Year	Percentage of all highway irrigation
2015	14%
2016	23%*
2030	Recycled water goal 100%

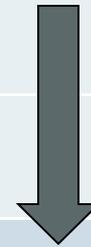
\* 9% increase from 2015 to 2016 will be accomplished by Directors Orders projects



## Item 4c Drought Response - Reducing Potable Water

Year	Usage
2010	6.96 B/gal
2011	6.40
2012	7.52
2013	7.41
2014	4.99
2015	2.80

2013 baseline



## Item 4b Drought Response – 2015/16 Highway Planting

Status	Projects in Design	Value	Projects in Construction	Value
No Change	139	\$58.1M	80	\$19.2M
Delayed*	21	\$0.89M	29	\$8.5M
Postponed**	15	\$7.2M	9	\$2.6M
<b>TOTAL</b>	<b>139</b>	<b>\$66.2M</b>	<b>118</b>	<b>\$30.3M</b>

\* Delayed within current working days of existing contract

\*\* Postponed to a future date; be aware if the project is in Construction phase, planting work may be deleted, not postponed

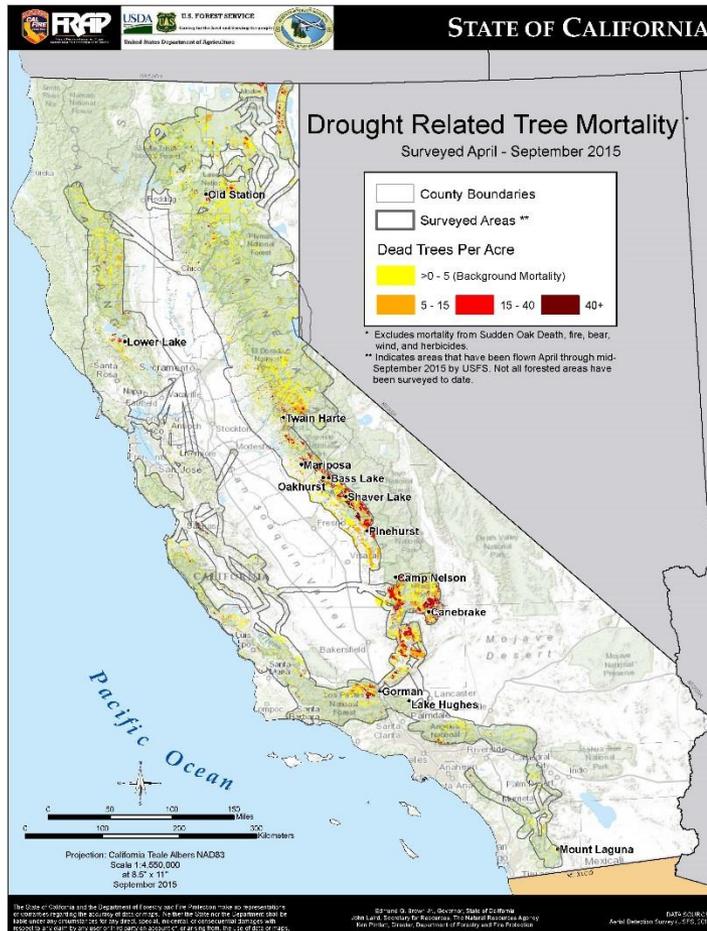
# Item 4c **Tree Mortality**

photo credit:  
Diversified Landscape Company



# Item 4c Tree Mortality

<http://www.readyforwildfire.org/bark-beetles-dead-trees/tree-mortality-info/tree-mortality-maps/>



Caltrans District	# Dead Trees
1	500
2	529
3	1396
4	1662
5	678
6	2500
7	4831
8	282
9	239
10	3071
11	300
12	300
<b>TOTAL</b>	<b>16,288</b>

Item 4d

# SHOPP PROGRAM REALIGNMENT



# Historical Construction Work

Peak \$ Last 8 Years		
2007/08	601 Projects	\$11.0B
2008/09	652 Projects	\$9.6B
2009/10	725 Projects	\$9.9B
2010/11	814 Projects	\$11.0B
2011/12	743 Projects	\$11.2B
2012/13	663 Projects	\$12.6B
2013/14	712 Projects	\$12.2B
2014/15	698 Projects	\$11.3B

# Looking Back (Roadside SHOPP Funding)

## Capital Only

Fiscal Year	Roadside Safety Improvements <small>235</small>	Highway Planting Rehabilitation <small>210</small>	Storm Water Mitigation <small>335</small>	Director's Orders (Drought Response) <small>131</small>	TOTAL FUNDING
07-08	\$0	\$11.87	\$71.90		\$83.77
08-09	\$2.00	\$9.13	\$42.38		\$53.51
09-10	\$1.94	\$2.72	\$30.41		\$35.07
10-11	\$3.56	\$2.60	\$1.18		\$7.34
11-12	\$2.40	\$0	\$76.73		\$79.13
12-13	\$11.33	\$0	\$128.91		\$140.24
13-14	\$12.85	\$6.90	\$85.30	\$48.00	\$153.05
14-15	\$31.04	\$0	\$43.59	\$19.00	\$93.63
<b>Annual Average</b>	<b>\$8.15M</b>	<b>\$4.15M</b>	<b>\$60.05M</b>		<b>\$80.70</b>

# Looking Forward (SHOPP Funding)

Fiscal Year	Roadside Safety Improvements 235	Highway Planting Rehabilitation 210	Storm Water Mitigation 335	Director's Orders (Drought Response) 131
2015-16	\$36M *	\$0	\$102.7M*	\$112M
2016-17	\$73M*	\$0	\$104.6M*	\$9.1M
2017-18	\$54.3M*	\$0	\$56.4M*	-
2018-19	\$90M	\$7M	\$90M	-
Average Annual	<b>\$63.3M</b>	<b>\$3.5M</b>	<b>\$88.4M</b>	<b>\$121.1M</b>

\* = Capital only

# SHOPP Funding\*

Highway Planting, Irrigation and Erosion Control	Historical Annual Average	Future Annual Average	Future Trend
Roadside Safety Improvements	\$8.1M	\$15M	↑
Highway Planting Rehabilitation	\$41.5M	\$41.5M	↔
Storm Water Mitigation	\$60.05M	\$88.4M	↑
Safety Roadside Rest Area Rehabilitation	\$0	\$11M	↑
New Safety Roadside Rest Areas	\$0	\$0	↔
Director's Order (Drought Response)	\$34M	\$30M	↓

\* FY 7/08 to 14/15

# SHOPP Structure & Project Funding

---

1. **Revised** to reflect Asset Management
2. **Accomplishment** of multi-objective projects
3. **Implementation** on projects going to construction in 2020

Item 5

**BREAK – 15 min**



# 2015 STANDARDS and 2015 ACTION ITEMS

Item 9



# 2015 Standards

## Key Changes

- Correcting errors in the 2010
  - “Grammar, Duplicate, Conflicts”
- Incorporating REVISED Standard Specification
- Incorporate proven SPECIALS (SSPs)
- Convert all sections to 4-part formatting
  - “General, Materials, Construction and Payment”
- 2015 Standards will be used on Construction Contracts next year

# 2015 Action Item Update

Action Item	Outcome/Impact
<b>Rock Blanket</b>	<b>Rock Blanket</b> constructability? Payment, cracks in pavement <ul style="list-style-type: none"><li>• Revised Standard Plan</li><li>• Reduced 12" concrete foundation</li><li>• Specified total excavation depth</li></ul>
<b>PEW</b>	3+ years in contracts difficult to bid & bond
<b>Compost</b>	Availability Incorporation Use as an Erosion Control Blanket

# Rock Blanket

## **Past Problems Noted by Caltrans Contractors:**

- Rock blankets showing minimum depth on detail
  - Excavation varies from zero to several inches depending on grade.
  - Excavation is included in the bid price.
  - Detail will be removed from standard plans so excavation has to be shown in project detail.
- Rock Blanket specification allows skinny un-round rocks:
  - New ASTM requirement will be included in the Standard to remedy issue.

# PEW 3+ years

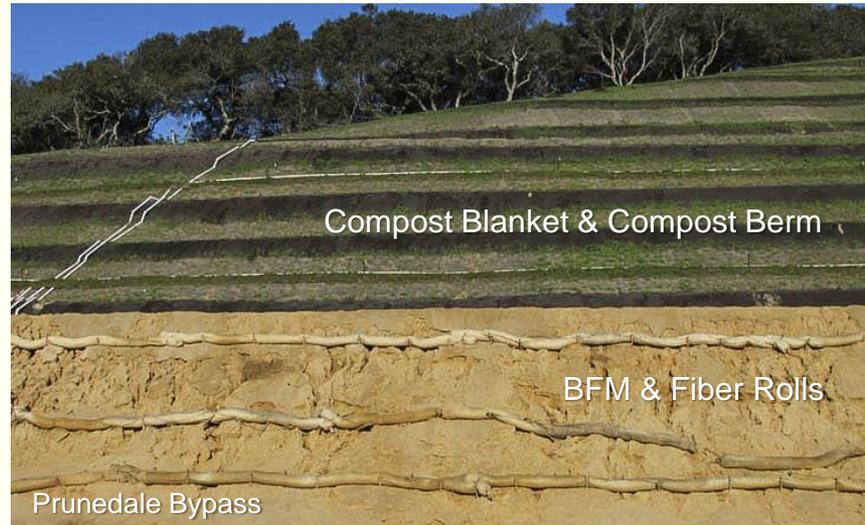
## **Past Problems Noted by Caltrans Contractors:**

- Plant Establishments over 3 years long
  - Very Rare (Ave. 2-3 projects a year statewide)
  - Caused from Permit Negotiations with Resource Agencies
  - State Statutes do not allow for reduced bonding during PE
- Split the project?
  - Feds will not fund “maintenance only” projects
  - Often causes conflict with second contractor pointing out poor installation on first contract for their lack of performance

# Compost Works:



# Compost Works:



# What We Heard:

## Issues:

- Compost Blanket:
  - Wind
  - Material availability
  - Trash content
- Compost Incorporate:
  - Steep slopes
  - Material availability

# What We Did:

- **Updated Guidance**
  - EC Toolbox Overview
  - Compost Blanket
  - Incorporate Materials
  
- **Training (Webinar)**
  - Soil Health, Plants, And Erosion Control
  - Compost Blanket
  - Incorporate Materials
  - Delivery - Summer 2016

# Guidance:

## IMPROVE SOIL HEALTH

	MAX. SLOPE (H:V)					Cut or Fill?	BENEFITS			COST
	4:1 	3:1 	2:1 	1.5:1 	1:1 		Soil Cover (1)	Soil Health (2)	Infiltration (3)	
<a href="#">Roughen Soil</a>	●	●	●	●	●	C/F	●	●	●	-
<a href="#">Decompact Soil</a>	●	●	●	●	●	C/F	●	●	●	-
<a href="#">Stepped Slopes</a>	N/A	●	●	●	●	C	●	●	●	-
<a href="#">Local Topsoil</a>	●	●	●	●	●	C/F	●	●	●	-
<a href="#">Imported Topsoil</a>	●	●	●	●	●	C/F	●	●	●	-
<a href="#">Incorporate Materials</a>	●	●	●	●	●	C/F	●	●	●	-

## PROVIDE SOIL COVER & IMPROVE SOIL HEALTH

	MAX. SLOPE (H:V)					Cut or Fill?	BENEFITS			COST
	4:1 	3:1 	2:1 	1.5:1 	1:1 		Soil Cover (1)	Soil Health (2)	Infiltration (3)	
<a href="#">Duff</a>	●	●	●	●	●	C/F	●	●	●	\$40,000
<a href="#">Mulch</a>	●	●	●	●	●	C/F	●	●	●	\$20,000
<a href="#">Compost Blanket</a>	●	●	●	●	●	C/F	●	●	●	\$15,000

# Compost Blanket: Guidance

## Compost



### What is These Treatments?

The compost bid item refer to two distinctly different types of work. Compost either be applied as a mulch-like blanket, typically 2" thick, onto disturbed soil areas, or compost can be applied to a slope and then mixed together with other materials (such as bark, straw or topsoil) when used along with the [Incorporate Materials specification](#). The Incorporate Materials specification only pays for the labor and equipment involved in the incorporation work. Payment for the compost material is paid for as part of the compost bid item described here.

A compost blanket provides several benefits, including protecting bare soil surfaces from wind and water erosion, water conservation, weed control, and providing the nutrients required for long term, sustainable plant establishment.

### Where to Use These Treatments:

- >> Use compost where disturbed site soils are sterile, compacted, and/or low in nutrients.
- >> Compost blankets are typically applied to slopes 1.5:1 (H:V) and flatter. The following application rates are suggested:
  - >> Slopes 1.5:1 (H:V) - 1" maximum thickness.
  - >> Slopes 2:1 (H:V) - 2" maximum thickness.
  - >> Slopes 3:1 (H:V) - 3" maximum thickness.
  - >> Slopes 4:1 (H:V) - 4" maximum thickness.

# Compost Blanket: Guidance



# Compost Blanket: Guidance

33

## Design Considerations for Compost Blankets:

- Verify compost availability - check producers list at: [US Composting Council \(USCC\) Seal of Testing Assurance \(STA\) Program Participants](#).
- Determine if new slopes will require incorporation of organics to support sustainable vegetation. See the Application Rate guidance section in the [Incorporate Materials web page](#).
- Specify "Medium" or "Coarse" compost materials for compost blanket work to minimize the loss compost due to wind.

Compost blanket is a great tool to reduce raindrop impact erosion and provide the nutrients required for long-term sustainable vegetation. However, sites subject to high winds or significant rain events may require additional erosion control treatments to hold the compost in place. The photos below highlight common erosion control combinations, together with their strengths and weaknesses.

### COMPOST BLANKET



This photo shows compost applied to a slope as a blanket, with no additional treatments layered on top. If compost is being applied with a pneumatic blower truck, the seed can be placed in a side bin in the blower truck and applied together with the compost in a single step. For compost to be applied via blower truck, all slope areas must be within 300 feet of a spot where the blower truck parks as the blower truck hose is just 300 feet long. If the slope to be treated is located below a roadway, compost can also be dumped from the roadway onto the top

# Incorporate Materials: Guidance



# Incorporate Materials: Guidance

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE	DEPTH
		DESCRIPTION	TYPE		
STEP 1	COMPOST	COMPOST	MEDIUM	130 CY/ACRE	
STEP 2	STRAW	STRAW	WHEAT	2 TONS/ACRE	
STEP 3	INCORPORATE MATERIALS	COMPOST/STRAW			4"
STEP 4	HYDROSEED	SEED	MIX 2	35 LB/ACRE	
		FIBER	WOOD	500 LB/ACRE	
STEP 5	HYDROMULCH	FIBER	WOOD	1,500 LB/ACRE	
		TACKIFIER	GUAR	125 LB/ACRE	

## Common Compost Application Rates

Compost Depth	Cubic Yards/Acre	Pounds/Acre	Tons/Acre
1/2"	68.5	54,800	27
1"	135	108,000	54
2"	270	216,000	108
3"	405	324,000	162

Average Compost Weight = 800 lbs/cubic yard (1050 lbs/cubic meter).

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	COMPOST	COMPOST	MEDIUM	130 CY/ACRE
STEP 2	ROLLED EROSION CONTROL PRODUCT (NETTING)	NETTING	TYPE A	
STEP 3	HYDROSEED	SEED	MIX 1	42 LB/ACRE
		FIBER	WOOD	500 LB/ACRE
STEP 4	HYDROMULCH	FIBER	WOOD	1,500 LB/ACRE
		TACKIFIER	GUAR	125 LB/ACRE

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE
		DESCRIPTION	TYPE	
STEP 1	COMPOST	COMPOST	MEDIUM	130 CY/ACRE
		SEED	MIX 1	42 LB/ACRE
STEP 2	HYDROMULCH	FIBER	WOOD	1,500 LB/ACRE
		TACKIFIER	GUAR	125 LB/ACRE

SEQUENCE	ITEM	MATERIAL		APPLICATION RATE	DEPTH
		DESCRIPTION	TYPE		
STEP 1	COMPOST	COMPOST	MEDIUM	270 CY/ACRE	
STEP 2	INCORPORATE MATERIALS	COMPOST			6"
STEP 3	COMPOST	COMPOST	MEDIUM	270 CY/ACRE	
STEP 4	HYDROSEED	SEED	SEED MIX	44 LB/ACRE	
		FIBER	WOOD	500 LB/ACRE	
STEP 5	HYDROMULCH	FIBER	WOOD	1500 LB/ACRE	
		TACKIFIER	PSYLLIUM	125 LB/ACRE	
STEP 6	ROLLED EROSION CONTROL PRODUCT (NETTING)	NETTING	TYPE A		

# Incorporate Materials: Guidance



## What is This Treatment?

The Incorporate Materials specification involves tilling compost, mulch, and/or straw into disturbed slope surfaces. Incorporating organic materials into the slope surface improves soil health and provides the nutrients and biotic activity necessary to support long term, sustainable growth of vegetation. The required depth of tilling or incorporation varies by slope gradient - steeper slopes are limited to a shallower depth of incorporation. Compost is typically mixed at a rate of 1 part compost to 3 parts soil, or 1/3 by volume. The rate of incorporation for other organic materials (such as straw or bark mulch) varies.

# Incorporate Materials: Guidance

## 3. MINIMUM SOIL ORGANIC MATERIAL (SOM) REQUIREMENT

The ideal compost application rate may also be quickly determined by correlating it with the typical minimum soil organic material (SOM) required to sustain healthy vegetation. While the ideal organic material (SOM) content varies based upon the specific ecoregion vegetation and soil type, research indicates that a typically sound SOM range is between 8-13%, which typically equates to **30% compost by volume in the soil**.

Keep in mind that during the first growing season, seeded disturbed soil areas typically exhibit sparse vegetative cover, thus requiring very low available nitrogen levels - often just 50 pounds/acre. Nitrogen applied that exceeds plant requirements will not be utilized for plant growth and may leach to lower soil horizons thus becoming unavailable for future plant growth.

The recommended application rates below are based upon a target Soil Organic Material (SOM) rate of 8-13%, a Total Nitrogen/Acre range of 1,000 - 3,000 lbs/acre, and an available Nitrogen amount of 100-300 lbs/acre. Lower application rates are recommended in arid regions, or [areas that typically receive less than 10 inches of precipitation per year](#). Higher application rates are recommended in decomposed granite soils, or in ecoregions that must support dense vegetation such as coastal forests. Specific site conditions as well will modify these general recommendations. Coordinate the use of Incorporate Materials with [Caltrans Division of Engineering Services \(DES\) Office of Geotechnical Design](#).

Treatment	Total N / AC	Avail. N / AC First Year	Compost Rate CY / AC	Compost Rate Tons / AC	Soil Organic Matter %	Max. Recommended Slope (H:V)
2" Compost incorporated in top 6" of soil	2,160 Lbs	216 Lbs	270	96	8-13%	3:1
3" Compost incorporated in top 9" of soil	3,240 Lbs	324 Lbs	405	162	8-13%	4:1
4" Compost incorporated in top 12" of soil	4,320 Lbs	432 Lbs	540	216	8-13%	4:1

# Compost & Wind:

## Compost, Blown Straw, Punched



# Compost & Wind:

Compost, Blown Straw, Tacked



# Compost & Wind:

## Compost, Coir Netting



# Compost & Trash:



# Compost & Availability:

## CALIFORNIA

### Agromin

5275 Colt St., Suite 3  
Ventura, CA 93003  
Contact: Bill Camarillo  
T: 805.650.1616  
F: 805-650-9630

[Email](#)

*Compost Manufacturing Facility*  
6859 Arnold Rd.  
Oxnard, CA 93030

### Aguinaga Green, Inc.

27910 Baker Canyon Rd.  
Silverado, CA 92678  
Contact: Daniel Dulac  
T: 714-849-9050  
F: 714-849-9210

[Email](#)

### American Soil Amendment Products

1450 Tierra Rejada Rd.  
Simi Valley, CA 93065  
Contact: Kurt Mikell  
T: 805-578-0052  
F: 805-578-0999

[Email](#)

### Arakielian Enterprises, Inc. d.b.a. American Organics

2065 Shay Rd.  
Victorville, CA 92394  
Contact: Ernesto Lozano  
T: 760-959-6485  
F: 760-246-0927

[Email](#)

### Burrtec Waste Industries, Inc.

13373 Napa St.  
Fontana, CA 92335  
Contact: Robert Rios  
T: 909-899-0911  
F: 909-899-5511

[Email](#)

3 *Compost Manufacturing Facilities*

1 – 13373 Napa St.

Same as office

2 – 1830 Aqua Mansa Rd. 

Riverside CA 92509  
T: 951-788-0544  
F: 951-788-0538

### 3 – Coachella Valley Compost Facility

87011 Landfill Rd.  
Coachella, CA 92236  
T: 760-983-4364  
F: 760-983-4184

2 *STA products at this facility*

### Cal Poly State University – Consumer Compost Use Participant!

1 Grand Ave.  
San Luis Obispo, CA 93407-0262  
Contact: Kevin Piper  
T: 805-756-8440  
F: 805-756-2592

[Email](#)

### CCL Organics LLC

1480 Goodyear Rd.  
Benicia, CA 94510  
Contact: David W. Burnley  
T: 707-751-0466

[Email](#)

### Community Recycling & Resource Recovery, Inc.

1281 N. Wheeler Rd., PO 716  
Lamont, CA 93241  
Contact: Dave Baldwin  
T: 861-845-4056  
F: 861-845-9700

[Email](#)

### Diestel Turkey Ranch

22200 Lyons Bald Mt. Rd.  
Sonora, CA 95370  
Contact: Jason Diestel  
T: 209 632 4960 ext. 29  
F: 209-632-5059

[Email](#)

*Compost Manufacturing Facility*  
10330 La Grange Rd.  
Jamestown, CA

### Earthworks Soil Amendments, Inc.

2 *STA products*  
1725 Agua Mansa Rd.  
Riverside, CA 92509  
Contact: Lefo Phororo  
T: 951-782-0260  
F: 951-782-0268

[Email](#)

### Engel & Gray, Inc.

PO 5020  
745 W. Betteravia Rd.  
Santa Maria, CA 93456-5020  
Contact: Bob Engel  
T: 805-925-2771

### Foothill Soils, Inc.

24981 Railroad Ave.  
Newhall, CA 91321  
Contact: Darren Drouin  
T: 861-254-1045  
F: 861-254-8094

[Email](#)

*Composting Facility*  
22925 Coltrans Ave.  
Newhall, CA

### Forest Wood Fiber Products

PO 279  
Lake Elsinore CA 92531  
Contact: Matt Smith  
F: 951-471-4050

[Email](#)

*Compost Manufacturing Facility*  
28737 Hwy. 74  
Lake Elsinore CA 92532  
T: 951-471-4040

### Gaudenti & Sons Corporation

2215 N. Gaffney St.  
SanPedro, CA 90731  
Contact: Bob Gaudenti or Kevin Fretz  
T: 310-291-4372  
F: 949-380-8301

[kgreenways@aol.com](mailto:kgreenways@aol.com)

*Compost Manufacturing Facility*  
20331 S. Main St.  
Carson, CA 90745

### Inland Empire Regional Composting Authority (IERCA)

12845 6th St.  
Rancho Cucamonga, CA 91739  
Contact: Jeff Ziegenbein  
T: 909-993-1981  
F: 909-993-1951

[Email](#)

### Keith Day Company, Inc. dba Gabilan Ag Services

3 *STA Products*  
1091 Madison Lane  
Salinas, CA 93907  
Contact: Kate Hurley  
T: 831-771-0128  
F: 831-771-0109

[khurley@keithdaycompany.com](mailto:khurley@keithdaycompany.com)

*Compost Manufacturing Facility*  
Marina Landfill  
14201 Del Monte Blvd.  
Marina, CA 93963

### Kochergen Farms Composting, Inc.

PO 11006  
Fresno, CA 93771  
Contact: Mike Kochergen  
T: 559-496-0900

[Email](#)

*Compost Manufacturing Facility*  
33915 Avenal Cut-Off Rd.  
Avenal, CA 93204  
T: 559-498-8383

### Las Virgenes Municipal Water District

4232 Las Virgenes Rd.  
Calabasas, CA 91302  
Contact: Robert Robins OR Jacqy Gamble  
T: 818-251-2512

[Email Robert](#)

OR [Email Jacqy](#)

*Compost Manufacturing Facility*  
Rancho Las Virgenes Composting Facility  
3700 Las Virgennes Rd.  
Calabasas, CA 91302  
T: 818-251-2300

### Liberty Compost/San Joaquin Composting, Inc.

1601 Skyway Drive, Suite 205  
Bakersfield, CA 93380  
Contact: Gary Bruggeman  
T: 861-391-5848

[Email](#)

*Compost Manufacturing Facility*  
12421 Holloway Road  
Lost Hills, CA 93380

### Lopez AG Service, Inc.

PO 294049 Sacramento, CA 95828  
Contact: Mitch Lopez  
T: 916-882-5450  
F: 916-882-6251

[Email](#)

*Compost Manufacturing Facility*  
11499 Florin Rd.  
Sacramento, CA 95830

### City of Los Angeles, Bureau of Sanitation

Contact: John Hamilton  
T: 818-834-5111  
F: 818-834-5116

[Email](#)

2 *Compost Manufacturing Facilities*, 3 *STA products*  
1 – Lopez Canyon Environmental Center  
11950 Lopez Canyon Rd.  
Lakeview Terrace, CA 91342  
2 *STA products – Compost and mulch*

2 – Griffith Park Composting Facility  
5400 Griffith Park Dr.  
Los Angeles, CA 90027

# Helpful Links

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## Caltrans Construction Contract Standards

[http://www.dot.ca.gov/des/hq/esc/oe/construction\\_standards.html](http://www.dot.ca.gov/des/hq/esc/oe/construction_standards.html)

## Contractors Corner

<http://www.dot.ca.gov/des/oe/contractor-info.html>

## Current and Past Advertised Projects

[http://dot.ca.gov/hq/esc/oe/project\\_ads\\_addenda/oe\\_project\\_archives.html](http://dot.ca.gov/hq/esc/oe/project_ads_addenda/oe_project_archives.html)

## Caltrans Landscape Architecture Program

<http://www.dot.ca.gov/hq/LandArch/index.htm>

# Permanent Erosion Control Establishment

Specification	Details
Permanent Erosion Control Establishment	<p data-bbox="629 482 1450 529"><b>2015 SSP 21-3.01 Draft</b> (see handout)</p> <ul data-bbox="629 582 1862 1190" style="list-style-type: none"><li data-bbox="629 582 1045 625">■ Design guidance<ul data-bbox="730 676 1325 815" style="list-style-type: none"><li data-bbox="730 676 1325 719">■ Use for periods = 1 year</li><li data-bbox="730 772 1093 815">■ Project factors</li></ul></li><li data-bbox="629 868 1155 911">■ Review &amp; concurrence<ul data-bbox="730 962 1862 1190" style="list-style-type: none"><li data-bbox="730 962 1360 1005">■ AGC, SCCA, UCON buy-in</li><li data-bbox="730 1058 1862 1190">■ Caltrans Legal, FHWA, Environmental, Construction divisions</li></ul></li></ul>

Item 7

# EXTRA WORK BILLS



photo credit Caltrans Transportation  
Library:  
Lindbergh Field

# Internet Extra Work Billing (iEWB)

## ■ **Prior to the work**

- Caltrans Issues a change order describing the work and pay method for work to be completed.
  - If necessary, Caltrans issues an *Authorization to Proceed (ATP)* prior to issuing the change order and reserves the change order number.

## ■ **Performing the work**

- Contractor performs the work per the change order
- State documents the work in their daily reports and captures labor, equipment, materials used, and hours worked.
- Contractor and Caltrans meet daily when performing the work and agree on labor, equipment, and materials used. Tentative agreements are sometimes used by the state.

# Internet Extra Work Billing (iEWB)

## Contractor submits billings using the iEWB system

### Internet Extra Work Bills

Welcome to the division's internet Extra Work Bill (iEWB) system webpage. Below you will find useful information for the iEWB system.

Caltrans policy requires contractors to use the internet to send extra work bills electronically to the resident engineer. The iEWB process involves payments made to contractors on highway construction projects for work performed for contract change orders. The current iEWB version allows prime contractors to send extra work bills electronically to the resident engineer for payment. Validating and verifying electronic extra work bills for correctness before sending them allows bills to be processed more efficiently than the paper process. The rejection and revision process is also improved because the extra work bill is viewable electronically by both contractor and resident engineer, eliminating delays caused by mailing paper documents. Below you will find helpful information for new and existing users of iEWB.

Contractors seeking assistance with iEWB can [click here](#) for help.

To get started using iEWB [click here](#) for instructions.

[iCAS/EWB system - For Caltrans Only](#)

[iCAS/EWB system - Contractors](#)

#### INFORMATION ABOUT



##### iEWB Information

- [About iEWB](#)
- [Getting Started with iEwb](#)
- [iEWB Contractor Org List](#)
- [iEWB New Release Information](#)
- [More Info on iEWB Entry options \[Online\]](#)

##### iEWB Forms

##### iEWB Support

##### Equipment Rental Rates

- [Optional Methods of iEWB entry](#)
- [iEWB District Admin List](#)
- [iEWB User Guide](#)
- [iEWB System Requirements](#)
- [More Info on iEWB Entry options \[Ftp\]](#)

# Internet Extra Work Billing (iEWB)

- **Caltrans reviews daily billings in the iEWB system**
  - If records are in agreement, daily billings are approved for payment. (Standard Specifications (SS), Section 9-1.04A)
  - If records differ, Caltrans makes payment based on Departments records. (SS 9-104A)
  - Billings are “rejected” for correction if adjustments are necessary. Rejected billings include comments documenting the basis for rejection. The system generates an auto email to the contractor (batched)
  - Rejected billings are revised by creating a “revision” and is the method used to adjust billings and pay the undisputed portions of billings.
  - Revised daily billings are submitted for review and approval.

# Internet Extra Work Billing (iEWB)

- **Caltrans reviews daily billings in the iEWB system (continued)**
  - Billings that are “Reject No Merit” cannot be corrected.
  - Approved daily billings are paid on the next monthly progress payment.
  - Adjustments to billings after payment is made can only be done by Caltrans by creating a “Correction” to the billing.
  - State pays 10% interest for any late undisputed progress payments, or 6% for undisputed claim payments after 60 days (SS 9-1.03)

# Internet Extra Work Billing (iEWB)

- **Submitting bills for Emergency Contracts**
  - Billings are submitted using change order number 1.
  - Billings can be submitted using the iEWB system prior to receiving the executed contract.
  - Caltrans can review and approve billings prior to receiving the executed contract.

# Internet Extra Work Billing (iEWB)

## Internet Extra Work Bill websites:

- Internet extra work bill system (iEWB)  
<http://www.dot.ca.gov/hq/construc/iewb/>
- iEWB Program Administrators:  
[http://www.dot.ca.gov/hq/construc/iewb/documents/iEWB\\_Admin\\_List.pdf](http://www.dot.ca.gov/hq/construc/iewb/documents/iEWB_Admin_List.pdf)
- iEWB Computer Based Training  
[http://www.dot.ca.gov/hq/construc/iewb/EWB\\_CBT/index.html](http://www.dot.ca.gov/hq/construc/iewb/EWB_CBT/index.html)

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Item 8

**BREAK – 15 min**



Item 6

# OPEN FORUM



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Selby's Soil Erosion Control

Item 10

# SUMMARY AND EVALUATION



Item 11

# ADJOURN

